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THE PRINCIPLES OF WAR

THE PRINCIPLES OF WAR

BY

MARSHAL FOCH

TRANSLATED BY

HILAIRE BELLOC

WITH TWENTY-THREE MAPS AND OTHER DIAGRAMS

LONDON

CHAPMAN & HALL, LTD.

1918

The original of this translation is a work known as "Des Principes de la Guerre." This work is a summary, in book form, of lectures delivered to the French Staff College by Marshal, then Lieutenant-Colonel, Foch seventeen years ago. It first appeared as a book in 1903.

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PREFACE TO THE FIRST EDITION

"*Shepherds' fires, lit on a stormy coast, to guide the uncertain seaman*": these lines might well be applied to the following pages. They were written for young officers. The reader must not look to find in them a complete, a methodical, still less an academic account of the art of war, but rather a mere discussion of certain fundamental points in the conduct of troops, and above all the direction which the mind must be given so that it may in every circumstance conceive a manœuvre at least rational. If it prove useful in this respect, by enlightening the reader, or by giving him a sound direction, this book will have fulfilled its purpose.

When young officers join their regiments and propose to study the conduct of troops in the field, they hear talk of certain principles which govern war. They attempt in vain to discover those guiding principles; they cannot find them either in what they have been previously taught, or in the reading of military works. "Principles," they are told, "are a matter of common sense, of judgment; their application varies according to circumstance; they cannot be written down or learned."

When the moment comes for exercise on varied ground and for the autumn manœuvres, they hear their senior officers criticise in the name of these same principles the tactics adopted. It then appears that though their elders know these famous principles, they often apply them wrongly. It is yet another example of the great gulf between the knowledge of a truth and its use in practice.

It has been attempted, in the present book, to define those principles; to explain from what necessities they arise, to what results they lead; how, being unchangeable, they can be applied in practice, with the arms of to-day, to modern war, the new features of which have

so profound an effect. For " though it is true that the principles of military art are everlasting, the factors that art deals with and has to take into account suffer a ceaseless evolution " (von der Goltz). Principles sometimes seem to contradict each other. You have to disperse troops in order to march; you have, again, to send out detachments for scouting and covering purposes; yet you must concentrate in order to fight. Which is, at a given moment, in the midst of the unknowns of war, the commanding necessity, the disposition to be taken? When and how must that disposition be altered in order to meet a new situation? Such questions show why it is necessary in a course of instruction to give the mind a direction which should enable it to judge rightly in every case. They also show why it is necessary to place at the student's disposal a system of forces which should guarantee the possibility of reaching definitely a desired result. To this end resort has been taken here to the detailed analysis of concrete historical instances. It is by such a method that this book attempts to foster, from the military point of view, a development of intelligence and will combined with the highest conception of duty, and this in order to attain by the most direct approach the strongest grasp possible of the only art that matters in war—Battle: Battle for victory.

Le Lieutenant-Colonel d'artillerie breveté,

F. Foch.

1903.

AVANT-PROPOS DE LA TRADUCTION ANGLAISE

En 1903, ce livre paraissait tel que : " Les feux de pâtres, allumés sur la côte orageuse pour guider le navigateur incertain." C'était un ouvrage élémentaire. Il fixait certaines vérités indiscutables, mais insuffisamment établies dans leur nature et leur application, les principes de la conduite des troupes à la guerre. Il orientait ensuite les esprits vers la solution des problèmes toujours variés de la guerre, par une gymnastique intellectuelle, basée sur l'étude de l'histoire. C'est ainsi qu'il comptait les préparer à pratiquer à la guerre l'art contemporain, d'après la connaissance de l'art ancien.

En 1918, sans parler des conditions morales : buts et procédés de guerre qui ont mis en scène la partie jusqu'ici inoffensive de la population et par là l'âme même de la Nation entière, mais simplement par suite des progrès de l'armement et du développement de l'industrie, l'Art a marqué une évolution profonde par l'emploi de moyens nouveaux.

Pour n'en citer qu'un exemple, la mitrailleuse et le fil de fer barbelé ont permis l'organisation rapide de centres défensifs d'une valeur indiscutable. Ils ont donné en particulier à la tranchée ou à un obstacle naturel une solidité qui permet d'étendre les fronts défensifs sur des espaces insoupçonnés jusqu'à ce jour, au total d'organiser promptement un large système défensif facile à tenir. L'offensive momentanément impuissante a cherché de nouvelles armes. Après s'être donné une formidable artillerie, elle a organisé les chars d'assaut, mitrailleuses ou canons à la fois blindés et automobiles, capables en tout terrain d'avoir raison du réseau de fil de fer et de la mitrailleuse énnemie.

A côté d'une fabrication de canons et d'une consommation de munitions aux proportions complétement inconnues jusqu'à présent est venue s'imposer une production d'autres engins réclamant encore de l'acier. C'est ainsi que la puissance industrielle des Nations a seule permis aux Armées d'attaquer, ou que son impuissance les a réduites à se défendre, au même titre que le nombre de leurs soldats.

L'aviation par des progrès techniques gigantesques a ouvert le théatre de l'air; elle assure la maîtrise des communications et des actions aériennes au mieux armé et au plus puissamment armé des deux adversaires. Autre appel à la lutte industrielle.

Et de même de la fabrication des obus toxiques et des matériels de toute nature que réclament des Armées de plus en plus difficile à nourrir, à abriter, à transporter. Une fois encore la capacité industrielle de l'un des adversaires détermine en partie la puissance de ses Armées.

Comme on le voit, ce sont bien des conditions nouvelles pour un Art, la Guerre, qui se fait déjà avec des moyens nouveaux. Autant dire qu'elle est un art tout nouveau. Comment en trouverait-on les régles précises dans un ouvrage de 1903 ?

Malgré cela, les vérités fondamentales qui régissent cet art restent immuables, de même que les principes de la mécanique régissent toujours l'architecture, qu'il s'agisse de constructions en bois, en pierre, en fer, ou en ciment armé; de même que les principes de l'harmonie régissent la musique quel qu'en soit le genre. Il reste donc toujours nécessaire d'établir les principes de la guerre.

Malgrè cela, et même à cause de cela, les hommes appelés à conduire les troupes devront se préparer à traiter devant un horizon de plus en plus large, des cas de plus en plus variés. C'est bien encore en développant par l'étude, leur puissance d'analyse, puis de synthèse, c'est-à-dire le conclusion, dans un sens purement objectif, devant des cas vécus, pris pour cela dans l'histoire, afin d'éviter toute déviation de l'étude, qu'on leur donnera la capacité d'asseoir une décision prompte et judicieuse, qu'on leur assurera de plus par la conviction

de savoir, la confiance suffisante pour prendre cette décision sur le terrain de l'action.

C'est ainsi que le présent ouvrage, quoique datant de 1903, peut encore servir à la formation des hommes appelés à conduire des troupes ou simplement désireux de réfléchir aux nécessités de la guerre.

F. Foch.

1.9.18.

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THE PRINCIPLES OF WAR

CHAPTER I

ON THE TEACHING OF WAR

"'' It is not some familiar spirit which suddenly and secretly discloses to me what I have to say or do in a case unexpected by others; it is reflexion, meditation."—NAPOLEON.

GENTLEMEN,

On the pediment of this building [1] may be read the inscription : École de Guerre (School of War).

Can these two words, *school* and *war*, be associated?

How can one conceive that this function, war, which displays itself on battle-fields, in the midst of the unforeseen and of danger, which makes use of surprise and of all the attributes of force, violence, and brutality, in order to create terror, may be prepared by that other function, study, which can only live in calm, in method, in reflexion, in discussion, and in reason?

In a word, " Can war be taught? Does its nature allow it to be taught? "

If the teaching of war is possible, on *what matter* does such teaching bear? Up to what limits can such teaching extend?

Under what form can *teaching* prepare for *action*?—without which nothing is of any avail when fighting is the thing in hand. Shall it be a course of lectures, a book, which, once understood and learned, would allow you to start on a campaign with the conviction of being able to solve any difficulties that might arise and to conquer no matter in what circumstances?

Finally, to what faculties of your mind does such a teaching make its appeal with the object of training

[1] The " École de Guerre " in Paris.

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them, of developing them, of preparing you for action; also, what dispositions does it require from you?

Such are the three points which must be solved in order to determine the line to be followed and to foresee the possible results.

War has been taught in all times, from Xenophon (who, in the *Cyropœdeia*, gives more room to his own views on the subject than to the deeds of his hero) down to Jomini, without mentioning Vegetius and others. In spite of that, it was not before 1882–3 that war was taught in France on a rational and practical basis, and this, although our School had been founded in 1876. Putting an inscription on the wall had not sufficed to create a real War School.

Where was the difficulty? Did it reside in the question how to determine the subject to be taught, the true *theory* of war; or in the *manner* of teaching that theory once it had been established?

The difficulty came from two sources.

The different causes which contribute towards determining the result in war were enumerated well enough: moral superiority, superiority in instruction, command, armament, system of supply, of fortification, etc. . . . It was rightly pointed out that this result is a function of all these variables:

$$f\,(a, b, c, \ldots k, l, m)$$

These variables were, however, divided into two groups:

(1) In the first group were placed the moral factors: the quality of the troops, of the command, of the will, of the passions aroused, etc., which cannot be appreciated with accuracy, notably in quantitative terms. These factors were systematically set aside from a rational study and from a theory of war which was intended to be accurate; or rather, they were supposed to be equal on each side. In the function

$$f\,(a, b, c, \ldots k, l, m)$$

the first set, a, b, c . . . were given a constant value, and the function of variables therefore became

$$f\,(k, l, m).$$

It only included a small number of variables.

(2) These latter variables were the material factors which of course exert an influence upon the result: armament, supply, ground, numerical superiority, etc. . . . but which are far from being everything.

At the same time, while the moral factors were suppressed as *causes*, they were also suppressed as *effects*. Defeat thus came to appear in the eyes of this school as a product of material factors, though we shall see later on that it is in fact a purely moral result, that of a mood of discouragement, of terror, wrought in the soul of the conquered by the combined use of moral and material factors simultaneously resorted to by the victor.

The conclusion of the old theory, then, was: in order to conquer, you must have superior numbers, better rifles, better guns, more skilfully chosen positions. But the French Revolution, Napoleon above all, would have answered: "We are not more numerous, we are not better armed; but we will beat you all the same, because, thanks to our plans, we will manage to have superiority in number at the decisive point; because by our energy, our instruction, the use of our arms, fire and bayonet, we will succeed in stimulating our own spirit to a maximum and in breaking yours.

These theories, which men had believed to be accurate because they had been entirely based on certain and mathematical data, had in fact the misfortune of being radically wrong; for they had left aside the most important factor of the problem, whether in command or execution, namely that factor which animates the subject, which gives it life: *man*, with his moral, mental, and physical faculties. They were further in error because they tended to make war an exact science, forgetting its true nature: that of a "dreadful and impassioned drama" (Jomini). It was much as if, in order to learn riding, you should confine yourselves to manipulating that jointed cardboard figure which represents a horse in the schools; as if you should limit yourselves to disjoint and then put together again the pieces of the figure, and to learn the names and places of the various parts of a horse's body. Would anyone be foolish enough to try and learn riding in that way, without taking into account the movement of the horse, its life, blood, and temperament—without bestriding the living being?

Such was the false attitude of those systems of military science which we will summarily study in the next lecture, and the fundamental errors of which were fully disclosed when the French Revolution threw into warfare an outburst of passions hitherto unknown.

These theories lead to the worst possible consequences. The first consequence attached to the teaching in our military schools; that teaching only aimed at the *material* side of the subject. Hence that exclusive study of ground, fortification, armament, organisation, administration, more or less cleverly situated bases, a study touching but the earthly part of the art of war.

As for the divine part, that which results from man's action, it was so loftily treated that it could be neither understood nor explained. Scarcely was it glanced at in a whole course of historical studies, and then after the manner of Alexandre Dumas, as a series of extraordinary, unexplained, unexplainable deeds. Nay, some would go so far as to admit the existence of mystical causes, connected with the marvellous or with fatality; the incomprehensible genius of the Emperor Napoleon (for instance) or even his luck.

But such a teaching was bound to lead to fetishism or fatalism, to contempt for work, to the belief in the uselessness of intellectual culture, to a certain laziness of mind.

It was assumed that either you had gifts or you had none; that either you were inspired or you were not; that, moreover, you could only find that out on the battle-field.

1870 woke us out of that sleep, for it gave us an enemy formed by the teaching of history—by the study of concrete facts. It was in such a fashion that Scharnhorst, Willisen and Clausewitz had, from the beginning of the nineteenth century, formed the Command of the Prussian Army.

In order to know and understand war they had not confined themselves to examining the tool which is used in warfare, and taking it to pieces in its component material parts without taking man—who uses it—into account.

In the book of History, carefully analysed, they had found the living Army, troops in movement and action,

with their human needs, passions, weaknesses, self-denials, capacities of all sorts : " *Far from being an exact science, war is a dreadful and impassioned drama.*"

There lay the essence of the subject to be scrutinised, as well as the starting point of rational study.

Seeing this, the true nature of war, which had been overlooked by a form of teaching too mathematical, in presence also of the gaps and mistakes which such a teaching had led to, another school arose. It arose more especially within the French Army. It summarised its views in the following axiom : *War can only be taught by War.*

I will not discuss the nature of the experience supplied by such an apprenticeship, nor the particular stamp which mind and will derive from the habit of taking decisions in presence of an actual enemy—and even more of the unavoidable disturbance produced by the enemy's blows.

For that school is not a continuous school at all : it can neither be opened at will, nor kept going for the benefit of our learning.

It is even insufficient, for it could not prepare us for the first actions (which will also be the most decisive ones) of the next war.[1] The campaign would be over when our instruction had only begun; and at the price of results very likely unfortunate.

Moreover, one ought not to be mistaken concerning the meaning and the reach of such a teaching.

We need not go back to Marshal de Saxe's " mules " in order to see that waging war without previous reflexion on its character does not indicate a clear perception of the principles which govern war, even when the question is merely how to establish a line of outposts, to defend a river or a frontier, or to determine the mission of a vanguard. Situations, however grave, do not produce of themselves light and felicitous extemporisation. Generally speaking, grave situations partially obscure even a bright intellect. It is therefore with a fully equipped mind that one ought to start in order to make war and even to understand war.

The truth is, no study is possible on the battle-field; one does there simply what one *can* in order to apply

[1] Words written before the Great War of 1914.

what one *knows*. Therefore, in order to *do* even a little, one has already to *know* a great deal and to know it well.

This principle explains the weakness, in 1866, of the Austrians (whom the war of 1859 ought to have made wiser), as against the Prussians who had not fought since 1815. We shall see this in detail later on. The first made war without understanding it (as, by the way, did the French in 1870, though they also had recently gone to war). The second had understood war without making it, by means of careful study.

Between these two extremes, the positivist teaching of a scientific theory which put aside the living element of war and thus became monstrous, and a teaching through action, no choice was possible; both had to be rejected; one had to *create* a new system. But one could not create by basing oneself either on the *material* factors, which are incomplete, or on both the *material* and *moral* factors, the latter being necessarily changing and undetermined.

One had therefore to give up the attempt to construct a complete theory of war by abstract mental work and a mere process of reasoning. One had to create a new system by basing oneself on *facts*.

We said: "If war is indeed a 'dreadful and impassioned drama,' let us study the drama itself. Let us look at the actors while they act in the different scenes that compose the play."

With this object in view, let us examine the facts which history gives us. In order to understand this complex phenomenon, war, under the numerous shapes it assumes, let us take those facts one after the other, let us examine them as closely as we can, under a microscope, so to speak; let us resort to microbiology, and let us do this while placing ourselves in the midst of the circumstances under which those facts arose: time, place, temperature, fatigue, numerous depressing causes, misunderstandings, etc. . . . ; let us consider the questions the actors have had to solve, the company in its zone of action, the battalion in the same way, the brigade, the army corps. Let us see the difficulties they had to conquer, and how they overcame them. Let us discuss the decisions taken, the result obtained; let us treat the question anew. Then only shall we see

the moral factors, so often mentioned, appear during the whole course of the study in their right proportions. Then only are we able to take them into account and to ascribe to them their due place in the result.

This minute study, as we shall see, has been completed in the case of several local actions (Saint-Privat, Froeschwiller, etc. . . .) which we shall follow. After that we shall come to the *operations*. We have then to consider in detail the functioning of a living and operating army; the kind of existence necessary to each of its component units; its needs, its difficulties, the rôle assigned to it.

The teaching of our School has resulted from the sum of such minute studies.

History is the base. "The more an army is deficient in the experience of warfare," writes General de Peucker, "the more it behoves it to resort to the history of war, as a means of instruction and as a base for that instruction. . . . Although the history of war cannot replace acquired experience, it can nevertheless prepare for it. In peace-time, it becomes the *true means of learning war and of determining the fixed principles of the art of war.*"

What is the *form* of this teaching born from history and destined to grow by means of further historical studies?

It came out in the shape of a *theory* of war which can be taught—which shall be taught to you—and in the shape of a *doctrine*, which you will be taught to practise.

What is meant by these words is the *conception* and the *practical application* not of a *science* of war nor of some limited *dogma*, composed of abstract truths outside which all would be heresy, but of a certain number of *principles*, the *application* of which, though they will not be open to discussion once they shall have been established, must logically vary according to circumstances while always tending towards the same goal, and that an objective goal.

The doctrine will extend itself to the higher side of war, owing to the free development given to your minds by a common manner of seeing, thinking, acting, by which everyone will profit according to the measure of his own gifts; it will nevertheless constitute a discipline of the mind common to you all.

Let us at once be more precise in order to avoid confusion.

Let us listen to Dragomirow :

" First of all, *science* and *theory* are two different things, for every art may and must be in possession of its own theory, but it would be preposterous to claim for it the name of a science. . . . Nobody will venture to-day to assert that there could be a *science of war*. It would be as absurd as a science of poetry, of painting, or of music. But it does not in the least follow that there should not be a *theory* of war, just as there is one for each of these liberal and peaceful arts. It is not theory which makes a Raphael, a Beethoven, or a Goethe, but the theory of their art placed at their disposal a technique without which they could not have risen to the summits they reached.

" The *theory of the art of war* does not lay claim to forming Napoleons, but it supplies a knowledge of the properties of troops and ground. It draws attention to the models, to the masterpieces achieved in the domain of war, and it smoothes thereby the path for those whom nature has endowed with military ability.

" . . . It does not allow a man to think quietly that he knows the whole business, while he only knows part of it. Receipts for creating masterpieces such as Austerlitz, Friedland, Wagram, for conducting campaigns such as that of 1799 in Switzerland, or battles such as that of Königgrätz, all this theory cannot provide. But it presents those models as types of study for the meditation of military men . . . and this not in order that they should imitate them in a servile way, but in order that they should imbue themselves with their spirit, and derive from them their inspiration.

" . . . If theory has erred, it is because very few theorists had seen war. . . ."

There is, then, such a thing as a theory of war. That theory starts from a number of principles :

The principle of economy of forces.
The principle of freedom of action.
The principle of free disposal of forces.
The principle of security, etc. . . .

Some have called in question at the outset the exist-

ence of such principles, and, next, their foundation in reason. Napoleon, however, writes : " *The principles of war are those which have directed the great Commanders whose great deeds have been handed down to us by History.*"

For Napoleon, then, principles of war really exist. These are to be found by studying the great deeds of the great Commanders. Therefore it is not surprising that they should have arisen before us from the history of Napoleon's wars.

Again Lloyd : " *For want of safe and fixed principles one falls into continuous changes, whether it is a matter of organisation, formations, or manœuvres.*"

Again, Marshal Bugeaud : " There are few absolute principles," he said, " but still there are some. When you try to lay down a principle concerning war, at once a great number of officers, thinking they are solving the question, exclaim : ' Everything depends upon circumstances, you must sail according to the wind.' But if you do not know beforehand what arrangement of sail agrees with what wind and what course, how can you sail ' according to the wind ' ? "

Again Jomini : " *Sound theories* founded on *principles* both *true* and justified by *facts* are, to our mind, in addition to history, the true training school of command. Of course they do not make a great man, for great men make themselves under circumstances favourable to their development; but they form leaders sufficiently skilful to play their part perfectly, under the direction of great generals."

We may conclude with reason : *The art of war, like every other art, possesses its theory, its principles ; otherwise, it would not be an art.*

This teaching of principles does not, however, aim at a platonic result such as mere learning or as merely filling your mind with a number of new and certain truths. " War is before all a simple art, an art wholly of execution " (Napoleon). To know the principles, if one did not know how to apply them, would lead to nothing. In war, a fact has priority over an idea, action over talk, execution over theory.

Useless would be any teaching that should stop at the idea, talk, or theory; which did not extend to the application of principles.

Therefore, the teaching of war does not concern itself only with *knowledge* (savoir), but also with *power to achieve* (pouvoir); beyond the cognizance of principles, it enforces their constant application, which alone is capable of fostering judgment, will, the ability to act rationally and therefore efficiently.

In order to have *power to achieve* (pouvoir), one must *know* (savoir). This is undeniable. "Knowledge is far from achievement; but the leap does not start from ignorance; quite on the contrary, from knowledge. *Vom Wissen zum können ist immer ein Sprung; der Sprung aber ist vom Wissen und nicht vom Nichtwissen*" (Willisen).

Moreover knowledge, a necessary condition, soon provides convictions, confidence, the faculty of enlightened decision. It creates the power to act, and indeed makes the men of action. It lies at the root of will.

"When a fighting man," says General de Peucker, "has the intimate feeling of being enlightened, when he knows that the instruction he has acquired enables him to find his way easily amidst very difficult circumstances, his will becomes more firm; he acquires the faculty of taking a clear resolution at the right time and of carrying it out in a practical way.

"Anybody, on the contrary, who is conscious of his own ignorance or of his need to ask for other people's advice is always undecided, perplexed, apt to lose his spirit.

"This quality of will is of course the prime element in a fighting man, but where can energy lead to, *if one is not sufficiently educated to know what goal must be aimed at and what is the way to reach the goal?*"

How can judgment and decision be trained in a school? Let Marshal von Moltke tell us:

"The teaching of military knowledge," he writes, "has before all the object of bringing the student to *utilise* his intellectual equipment (*i. e.* the theory his master has taught him). Such a reciprocal and quickening action cannot be obtained when the master merely teaches and the student merely listens. On the contrary, it takes place quite naturally when the professor adds to his technical lessons some *exercises* in the course of which the *matters taught* are *applied to some particular cases.*"

Here, then, is the method: once a matter has been taught, you must apply it to particular cases. We will see later on what is meant by "particular cases."

General de Peucker adds on the same subject: "Officers following a course of instruction must be amply trained *to act by themselves*, in order to develop their ability to utilise their theoretical knowledge in the practice of life. . . . To grasp a scientific truth does not mean that one is able to find it again later on by means of *reasoning*. There is a long distance between an intellectual *conception* and that priceless faculty which allows a man to make acquired military knowledge the basis for his decisions in the field.

"Between those two terms, *scientific conception* and the *art of commanding*, there is a gulf which the method of teaching must bridge if it is to deserve the name of a *practical method*.

"*Application* must therefore be resorted to."

Here appears, at the same time as the method, the object which is being aimed at: it consists in passing from the scientific conception to the art of commanding, from truth mastered and known to the practical application of that truth. The gulf was bridged by the Prussian School. In proof, consider the commanders of the vanguards in 1866. Although they had only recently left their school, they started the business of that campaign with a pluck, a skill, and thereby an efficiency which had hitherto been thought to belong exclusively to men who had already fought both often and well.

Let us do the same; let us cross the gulf by the same roads, the same bridges.

In order to do this, we must have a *practical* teaching including application made to *particular cases* of fixed principles, drawn from history, in order (1) to prepare for *experience*, (2) to teach the *art of commanding*, (3) lastly, to impart the *habit of acting correctly without having to reason*.

We have mentioned *particular cases* instead of *general cases*, for in war there are none but particular cases; everything has there an individual nature; nothing ever repeats itself.

In the first place, the terms (données) of the problem are only seldom *certain;* they are never *final*. Every-

thing is in a constant state of change and reshaping. These terms, therefore, only possess a *relative* value as compared to the absolute value of mathematical terms.

Where you have only observed one company, you find a battalion when you come to attack.

One regiment of 3000 rifles, if well cared for, represents, after a few days campaigning, 2800 rifles; less well managed, it will no longer include more than 2000. The variations in the *moral* are at least as ample. How then compare two regiments with each other? Under the same name they represent two utterly different quantities. Illness, hardships, bivouacking at night, react on the troops in various ways. Certain troops after such an ordeal are soon only a force in name. They are nothing but columns of hungry, exhausted, sick men. Or you may have a division still called "a division" though it shall have lost part of its batteries, etc. . . . The same is true of the tactical situation, which varies as seen by the one side or the other. The interest of one of the adversaries is not the mere reverse of the interest of the other: so with their tactics. Suppose one force has to escort a convoy, while the other has to attack it: do you believe that the manner of fighting would be the same on both sides? Evidently not. On the same ground, under the same circumstances of time and place, one would have to proceed differently in each of these cases.

The same regiment, the same brigade, will not fight in the same manner when they have to carry out the pursuit of a beaten enemy and when they will have to meet a fresh adversary, although they will use in both cases the same men, the same rifles, the same numbers.

Again as regards two advance-guard engagements: one can never be a mere repetition of another because, independently of the fact that the ground varies from one to the other, they are both governed by similar differences other than those of time and space.

The consequence of all this is that each case considered is a particular one, that it presents itself under a system of special circumstances: ground, state of the troops, tactical situation, etc. . . . which are bound to impress upon it an absolutely original stamp. Certain factors will assume an additional importance, others a lesser one.

This absence of similarity among military questions naturally brings out the inability of memory to solve them; also the sterility of invariable forms, such as figures, geometrical drawings (épures), plans (schémas), etc. The only right solution imposes itself: namely, the application, varying according to circumstances, of fixed principles.

Fixed principles to be applied in a variable way; according to circumstances, to each case which is always a *particular* one and has to be considered in itself; such is our conclusive formula for the time being. Now does not such a conclusion bring us back, on the field of practical application, to the very intellectual anarchy we had hoped to remedy by creating unity of doctrine and establishing a theory?

Not in the least. Whatever may be your present impression, you will soon find that, in applying fixed principles to various cases, concordance reappears as a consequence of a common way of facing the subject—a purely objective way.

From the same *attitude towards things* will first result *a same way of seeing* them, and from this common *way of seeing*, arises a common *way of acting*.

The latter will soon become itself *instinctive*: another of the results aimed at.

What I have just said needs expansion.

"From the same attitude towards things results a same way of seeing them."

Just as the aspect of a monument varies according to the place from which it is looked at and remains the same to all the observers who approach it from the same side, so do military questions extract the same answer from all when they are being faced from the same point of view. But there is at war only one manner of *approaching*, of facing the questions, namely, the *objective one*.

The military art is not an accomplishment, an art for dilettante, a sport. You do not make war without reason, without an object, as you would give yourself up to music, painting, hunting, lawn tennis, where there is no great harm done whether you stop altogether or go on, whether you do little or much. Everything in war is linked together, is mutually interdependent,

mutually interpenetrating. When you are at war you have no power to act at random. Each operation has a *raison d'être*, that is an *object;* that object, once determined, fixes the nature and the value of the means to be resorted to as well as the use which ought to be made of the forces. That object is, in each case, the very answer to the famous question Verdy du Vernois asked himself when he reached the battle-field of Nachod.

In presence of the difficulties which faced him, he looked into his own memory for an instance or a doctrine that would supply him with a line of conduct. Nothing inspired him. "Let history and principles," he said, "go to the devil! after all, *what is the problem?*" And his mind instantaneously recovered its balance. This is the objective way of treating the subject. Every military operation must be approached from the side of its object, in the widest sense of that word, What is the Problem?

That common attitude towards things, followed by a common way of seeing them, produces, as may well be suspected, a common way of acting. But further, once the question is put in that way, the answer that follows is at the same time *complete* and *appropriate*, involving *the adaptation without reserve of the means to the end.* It is an *a priori* logical solution in so far as it is exclusive of any preconceived form and is inspired solely by the one particular case and handles that case wholly in itself. A rational conduct proceeding from objective study—such is the first *certain* and *common* result which all will attain who approach the study of a military case by asking themselves: What is the Problem? Once the habit has been acquired of studying and acting thus in numerous concrete cases, the work is done unconsciously, instinctively, automatically, so to speak, and this in consequence of the training the intellect has received. Verdy du Vernois is the proof of it. He sent history and principles to the devil, but he used the knowledge he possessed of them, for, without his possessing his subject, without the acquired habit of reflecting, discussing, deciding, he could not have acted in face of a difficult situation.

Such results are again illustrated by another and more commonplace instance. A wild fowl flies up in

front of a sportsman; if it goes from right to left, he fires in front and to the left; if from left to right, he fires in front and to the right; if it comes on him, he fires high; if away from him, he fires low.

In each of these cases, he applies in a *variable* way the *fixed* principle: to get three points upon one straight line, his eye, the sight and the quarry, at the moment the shot takes effect.

Whence does he derive his method of application? Does he resort to discussion of the problem? He has not got the time. He unconsciously derives his method of application from the sight of his object under the particular surrounding circumstances: he swings from left to right, or the reverse, at a given speed; a purely objective process. And from seeing as quickly as possible, there naturally results a tension of all the means in one single direction; he has practised the art of acting rationally without reflecting.

What, then, is wanted in order to supply a principle, is to look at the object in itself under the conditions of the moment, and, so to speak, through the atmosphere of the particular case characterising the situation. Our own object is the enemy, on whom we want to react in a given way according to the day, to the mission we have been given; we have to make reconnaissance of the enemy, or to pin him, or to delay him, or to strike, etc.

Thence—from the sole consideration of the object—must be derived, first by means of reasoning (when, as here, in this school we have to study), later when in the field, automatically our whole conduct, our whole manner of acting.

Such an application of principles, even in the case of a sportsman, implies, however, that he is aware of the means, that he knows how to use them, that these means are ready: his gun is in good condition, and loaded; his arm is active; his eye is well trained.

This is the subjective part of the business and must have been arranged beforehand.

This will explain to you why, before coming to the combined use of troops of all arms, you have to know them, to be able to handle them. The same is true of the *ground*, a fourth arm placed at your disposal; it is

necessary to master everything it contains in order to be able to find in it what you will have made up your mind you must be looking for. So again with *fortification*, which is but the strengthening of ground with a view to the defensive.

This consideration justifies the necessity of establishing, besides general tactics, the teaching of the *technique* of all these arms and of the way of using each of them.

Once we have reached this point of defining both the principles and their method of application, our teaching must not stop there. Otherwise, owing to the dryness of such a mathematical construction of things, we should still miss the very nature of war, " a dreadful and impassioned drama."

By adopting such a defined form we would set a limit to study. But war is a truly unlimited ground. The fields of great human activities are never closed. Their present term is marked by the extent of what can be seen, by the horizon. But the horizon moves when we advance or rise. Who would think of fixing limits to human eloquence, to art in general, to industry, commerce, medicine? The limits are determined at any moment only by the point which knowledge, acquired science, and the power of the applying brain, have for the moment reached. It is the same with war.

As Clausewitz has put it: " War is not a system, a closed doctrine. Every system, every doctrine, has the limitative nature of a synthesis. There is necessarily a contradiction between such a theory and war itself, for the practice of war extends itself in all directions to undetermined limits."

In order to keep open the field of our studies, and at the same time to *animate* them by the sight of action, we shall enter (always by means of history) upon the higher parts of war. Teaching in that department will be less didactic, but none the less profitable.

" The paths that lead to knowledge are then, on one side, the historical path, and the philosophical path on the other; both must and can complete each other in order to promote knowledge about war and to prepare for the power which, improved in peace-time by instruction, must finally, as being the art of conducting troops,

allow military action to reach an efficiency which can only be guaranteed by the soundest judgment, the firmest will" (von Scherf).

Napoleon has said: "Tactics, the science of the engineer, of the gunner" (what he calls the earthly part of science), "can be taught nearly as well as geometry. But the knowledge of the higher parts of war can only be acquired from experience and from studying the history of the wars of the great Commanders. You cannot learn from a grammar how to write a book of the *Iliad*, a tragedy of Corneille."

This does not mean that it is useless to study grammar, but only that, in a matter concerning art, to *know the rules* is not synonymous to *being able to create*.

After we have studied the grammar of the thing and seen how it is applied, we peruse the masterpieces in order to follow the human mind as it displays itself in the higher parts of military art, more especially in strategy. You will then see how strategy manifests itself, and you will understand that though you can easily analyse its component parts, it is not as easy to build up the whole; that though good strategy is easily understood once it has been done, it is not a thing easy to do.

Marshal von Moltke shall tell us in what the matter consists and also which is the best method of treating it.

"What is necessary," he writes, "is, in the midst of particular cases, to discover the situation, such as it is, in spite of its being surrounded by the fog of the unknown; then to *appreciate soundly* what is seen, to *guess* what is not seen, to *take a decision quickly, finally to act with vigour*, without hesitation.

"One has to take two elements into account, the first a known one: one's own will; the other one unknown: the enemy's will. But one has also to add factors of a different kind, which escape prevision, such as temperature, sickness, railway accidents, misunderstandings, mistakes, in a word all the elements of which man is neither the creator nor the master, be they called luck or fatality or be they treated as providential. This does not, however, imply that war is to be conducted arbitrarily or blindly. The calculation of probabilities shows that these chance events must necessarily turn out as often to the good as to the bad for either party.

"*Therefore any general who, in each particular case takes, if not the best possible decisions, at least rational decisions, has always a chance of reaching his goal.*

"*Clearly enough, theoretical knowledge does not suffice for this;* what is required is a *free, practical, artistic* development of *mind* and *will*, based of course on a previous military culture and guided by experience—either by experience derived from the study of military history, or by experience acquired in the course of one's own existence."

After considering whether strategy is an art or a science, he concludes:

"Strategy is a system of devices. It is something more than a science. It is *knowledge transferred into real life*, a development of the original directing thought made in accordance with everchanging events, the art of acting under the pressure of the most difficult circumstances."

Such is the opinion of Moltke, whom some have thought possible to characterise by stating that he had "the merit of doing well all he did," an appreciation which would make him a sort of superior scholar, a sound appreciation all the same, as it throws a keen light on a man who served his country so well and attained by hard work such high results that he reached genius merely by being methodical.

Those are his methods: "take rational decisions," and in order to do this, "develop freely, practically, artistically the mind and the will, with the help of a previous military culture resulting either from the study of history, or from one's own experience."

In other words, strategy is but a question of *will* and *common sense;* in order to keep that double faculty in the field, you must have fostered it by training, you must possess a *complete military culture* (humanités militaires), you must have *examined and solved a number of concrete cases.*

This is the method we shall follow. In the course of the practical applications our strategical studies will lead us to, you will also arrive at what we call the *doctrine* or *mental discipline*, which consists first in a common way of objectively approaching the subject; second, in a common way of handling it, by adapting

without reserve the means to the goal aimed at, to the object.

Moreover, study of history thus conceived will be to us not only a means of teaching, but also a means of discovering, and thereby, a way of developing teaching.

After General Maillard, who lectured in this school on the division and the army corps, we had General Bonnal, who studied in the same way an army, the conduct of an army under the first Empire.

An army, as much as an army corps, is nowadays a subordinate unit. It does not involve creation, the exercise of an art, but simply execution. One has to rise higher and study the functioning of a group of armies. The accomplished facts then reappear as a sort of field to be explored in order to feed our science and to provide our theories with some foundation.

The great discoveries of man proceed from empiricism; consider steam, electricity, vaccination, etc. . . . Genius, a gift of nature, creates by itself; this is art. Then comes work, which takes up the facts, analyses, classifies, establishes relations as between causes and effects, wherefrom logic, laws, that is *science*, are bound to result. The art of war does not escape that rule.

Are we to say that the power of Genius is supreme and mere Work suffers from radical impotence? This might be a well-founded conclusion if Genius were, as Work is, within reach of everybody. But it is not.

We will, on the contrary, lay stress on the efficiency of work, of method, of science, in the absence of genius, which is as rare as all the great gifts of Nature. We shall see Theory start by getting her lessons from genius, and then comment and discuss those lessons: "Is not what genius has done the best of rules to be followed, and can theory do anything better than show why and how this is true?" (Clausewitz). Also we shall find later on "Science giving a great number of its adepts the benefit of its fruits, putting within reach of an average intellect the understanding and the conduct of great military affairs, infusing into the very veins of an army the principles of experience, warranting in other words a community of thought, wherefrom individual initiatives and rational decisions spring up as an *ultima ratio*" (General Bonnal). We shall see the results of work, method, science. We shall see 1870,

the Prussian General Staff, a set of average minds, successfully conducting a great war with three or four armies, though the difficulties which the matchless genius of Napoleon had met in 1812 and 1813 are notorious. In spite of his scale, Napoleon failed in his task. The body had but one head; it lacked muscles, articulations, arms, without which such a vast whole could not live.

Yet what were the numbers of 1812 and 1813 as compared with those of 1870? What are these latter as compared with those of to-morrow? The technical side of war—railways, balloons, telegraphy, etc.—has increased in a similar way. "To-day, the Commander-in-Chief cannot sum up everything in his own person. Genius itself will want auxiliaries full of initiative and well taught. How much more will any general who does not belong to the stars of first magnitude need to be helped and completed! Managing an army is too complex for a single man. Certain technical branches require, besides, special knowledge" (von der Goltz).

How, then, in the enforced absence of a sufficient genius, can the means be found rationally to conduct the enterprise, the war, with such masses of men, if not among a corps of officers who shall have been trained by method, work, science, whom the same spirit shall pervade, who shall submit to a common mental discipline, who shall be numerous enough to be able to move and manage the heavy machine of modern armies?

The foundation being laid down, in what mental disposition should the student set to work?

The first thing to do is to grasp a certain number of truths: therefore we must have freedom of mind, no prejudices, no prepossessions, no fixed ideas, no opinion accepted without discussion and merely because it has been always heard or practised. There should be one test only: *reason*. In the second place, those truths must be applied to *particular* cases: first on the map, then on the ground, later on the battle-field. Let us beware of analogy, let there be no appeal to memory—it flies at the very first shot. Let us also do away with set plans, or any form possessing no more than an intrinsic value limited to itself. We want to reach the field of action with a *trained judgment*. To

have this it is enough to train and to begin training to-day. With this object in view, let us look for the *raison d'être* of things. It will teach us how to make use of them.

Finally we must automatically, unconsciously apply those truths. We must therefore have an intimate knowledge of them; they must penetrate our very marrow, become part and parcel of ourselves.

Those are happy, who have been born believers, but they are rare men. One is not born with learning either. Every one of us must make for himself his faith, his convictions, his knowledge of things. Here, again, the result will not be produced by a sudden revelation of light coming in a flash or by an instantaneous development of our faculties. We shall only reach it by a continuous effort of penetration, absorption, assimilation, by a repeated and detailed labour. Do not the most elementary of arts require the same from us? Who would boast of teaching within a few moments or even within a few lessons fencing, riding, etc.?

Your work here consists in a constant appeal made to *reflexion:* never take dispositions which are not based on reason; make a note during a lecture of the thoughts that strike you; after practising on the map, determine the points of doctrine which henceforth appear to stand beyond discussion; after an essay has been corrected, compare your own views with those of the instructor. Then only will your minds exert themselves in the direction of the subject just studied; then only will the principles be assimilated so as to become a basis for the decisions you will have to take. You will be asked later on to be the *brain* of an army. I tell you to-day: *Learn to Think.* In presence of each question, considered freely and in itself, you must first ask yourselves: What is the Problem? There is the beginning of the state of mind we are looking for; there is the direction wanted, a purely *objective* one.

"It is not some familiar spirit which suddenly and secretly discloses to me what I have to say or do in a case unexpected by *others;* it is reflexion, meditation" (Napoleon).

CHAPTER II

PRIMAL CHARACTERISTICS OF MODERN WAR

"Whoever writes on strategy and on tactics ought to confine himself to teaching *national* strategy and tactics only, for no other can be profitable to the nation he is addressing."—VON DER GOLTZ.

OUR task is to study and teach *war*. Before we undertake that study, it behoves us to determine exactly what this thing "war" of which we are speaking really is. Do we all agree about the subject we have in mind when we use the word "*war?*"

If we do not, if we are not engaged in analysing the same idea, misunderstandings and therefore mistakes are bound to begin.

Let us, then, fix to-day the general features of war, in particular its *object* and *means*, the rational way in which the *goal* must be conceived in the France of to-day, so that we may find in that study the foundation of our conduct, that is, of our tactics.

For "*war is produced by, and receives its form from, the ideas, feelings and relations which obtain at the moment it breaks out*" (Clausewitz).

Evidently enough, were I to speak about strategy and general tactics in Brussels instead of in Paris, my study would bear on a peculiar form of war. The situation of Belgium is known to you: a neutrality guaranteed by Europe, which is perhaps nothing more than a word, but has, in any case, hitherto guaranteed the existence of that little State; further, the immediate neighbourhood of two great Powers, Germany and France, from neither of which does any serious military obstacle separate that State, by either of which it might be easily conquered if the other neighbour, or Europe as a whole, did not intervene in the struggle. The special theory of war that would have to be presented to the Belgian Army would have a well-determined object, namely that of delaying as much as possible

the advance of the invading neighbour. The study would then consist in finding out how the Belgian Army can perform such a part, by avoiding the *decision* by arms and *adjourning* the judgment of battle.

Such a conclusion would necessarily influence the whole military state of the nation: organisation, mobilisation, armament, fortification, as well as the instruction of the troops, not excluding the training of the company, of the individual private.

If from Brussels we proceed to London, we again find a different situation, different ambitions. Those are equally familiar to you. There you would find an insular situation which ought to be maintained intangible by a *protecting* organisation; also the ambition of maintaining and developing an Empire beyond the seas and in both hemispheres. This would require another way of handling the problem, another theory of war.

So, again, in Madrid. Every idea of territorial extension on the Continent is temporarily discarded by Spain in view of its geographical situation, of the nature of its frontiers, of its political, financial state, etc. . . . What does, then, such a country request from its army? The maintenance of the *integrity of national territory.* Would not in that case the best lesson on the art of war be derived from reading certain pages of the history of Spain from 1808 to 1814?

The same is true of Rome, or Berne. Each country finds itself in a different situation, requiring a distinct handling of the problem.

You must not conclude that, in the matter of warfare, there is no such thing as an *absolute* theory and that you have only to deal with *contingencies.* You must not adopt Pascal's sceptic views: "Vérité en deça des Pyrénées erreur au-delà"; or his "trois degrés au-dessous du pôle qui contiennent toute la jurisprudence." Let us simply and first be aware of the existence, in the study we are making, of the *concrete case;* in that concrete case, one of our data is evidently found in the geographical position of a State, from which we must start in order to establish the theory which will allow us to reach a specifically national end. To such a geographical position we add the political, financial, military state of the nation, also the shape of its territory, the situation of its neighbours, the nature of the rights to be

defended or the claims to be asserted by it—all things which differentiate a given nation from all the other Powers.

Moreover, the same applies to time, which represents another datum of the problem, another determining factor of the concrete case.

Suppose that, instead of speaking for the French of to-day, I had to treat the same subject eighty years earlier, on the morrow of the great lessons of the Revolution and of the Empire. In that case, without losing sight of the very nature and essence of war, I should have to take into account the state of the Continent. In presence of a Europe exhausted by the struggles it had just gone through, a Europe which had temporarily renounced conquest and the appeal to arms and had adopted for its ideal a Holy Alliance framed for the maintenance of dynastic legitimacy, what France requested from her army was the means of holding her rank in such a Europe attached to monarchic and dynastic interests, as well as the means of supporting, if need be, by some armed demonstration, a cabinet policy, that is a diplomatic policy based on admitted international manners, or rather conventions.

Hence a special condition of military affairs, involving a particular kind of recruiting, instruction, and fortification, and an equally particular conception of war. Hence, again, the study and the preparation of a restricted type of war, *diplomatic war*, which sufficed for the needs of the time.

The true theory, that of the absolute war which Napoleon had taught Europe, could afford to make concessions in these moments of general exhaustion, of restrained ambitions, of reduced means, and still lead to some measure of success. In order to conquer, it is enough to be more ambitious and stronger than the adversary. It is not necessary to be very ambitious and very strong if he has but little strength or ambition. This will explain to you our successes of 1854 and 1859, two wars with a purely dynastic object, namely the object of destroying the treaties of 1815, the black page of Napoleon's history.[1]

[1] The war of 1870 was again a dynastic war, undertaken by the French Government in order to consolidate their tottering power by presumably easy victories.

Such a theory of war, limited as it was in its ends and means, was no longer of service from the day when an ambitious nation, Prussia, rose up out of conservative and monarchical Europe, resolved to take German interests in hand, and capable of imposing military conscription, thereby once more giving to war a fully national character and, what is more, the *scale* and the *pace* of the Napoleonic contests.

It is because we ignored that radical transformation among our neighbours and the consequences it was bound to bring about that we, who had created national war, became its victims. To a people in arms, organised for conquest, invasion, a fight to a finish, we opposed a damaged tool, a reduced army, an army recruited among the poorest and least instructed part of the nation, as well as the processes of the eighteenth century (one does not go without the other) which could only do for a diplomatic war, for a war with a limited end.

It is because the whole of Europe has now come back to the national thesis, and therefore to armed nations, that we stand compelled to-day to take up again the *absolute* concept of war, such as it results from history. Now precisely because we are looking out for an absolute concept, it is not immaterial whether we study such or such page of history, such or such war, even if conducted with success, in order to extract the theory we want.

We cannot draw our inspiration indifferently from Turenne, Condé, Prince Eugène, Villars, or Frederick the Great, even less from the tottering theories and degenerate forms of the last century. The best of these doctrines answered a situation and needs which are no longer ours.

Our models, and the facts on which we will base a theory, we must seek in certain definite pages of history, namely from that period of the French Revolution when the whole nation was arming itself for the defence of its dearest interests: Independence, Liberty; from that period of the Empire, when the army born of that violent crisis was taken in hand and led by the greatest military genius that ever was, and thus gave rise to matchless masterpieces of our art.

To proceed in that way does not imply following a preconceived idea or a fixed system. War, like all other human activities, undergoes changes; it does not escape

the law of evolution. We live in the century of railways, coaches were none the less useful in their day. But we must not use coaches when we want to travel fast and well.

To deny the change wrought in warfare amounts to calling in question the French Revolution, which was not only philosophical, social, and political, but also military. Not only did it dare to declare war on kings and tyrants, but also victoriously to oppose the inexperienced but at the same time violently impassioned bands of the *levée en masse* to the minutely and rigidly trained troops of the older Europe.

Nor can one call in question Napoleon's victories, the causes of which have been given by Clausewitz,[1] when he wrote:

"Under the energetic leadership of Bonaparte, the French, treading underfoot the ancient *processes* of warfare, undertook the conquest of Europe with a wonderful and hitherto unexperienced success. Upsetting everything on their way, they sometimes, at their very first stroke, shook to its foundation the most powerful State."

Later on we shall see what ought to be understood by "ancient processes." After he had thus explained the past by the present, Clausewitz looked ahead with anxiety to the future, which might well forget the fundamental lessons of these wars, and added:

"Who knows whether, within a few generations, people will not again take a fancy for the *old fencing and for antiquated methods;* whether *Bonaparte's fights and battles will not then be condemned as being acts of barbarity?*

"All the efforts of military writers must tend to warning against these dangerous errors. May Heaven grant our labours to exert a wholesome influence over the minds of the men whom He has marked out for directing the government and the affairs of our dear country!"

It is from this prophetic wish, once it became a reality,

[1] Contrary to what happened with the social revolution which had produced all its effects, good or bad, among ourselves, raising certain classes, lowering others, the revolution wrought in the art of war developed *all* its power at the expense of our enemies. It was therefore natural that foreigners should have studied and measured the extent and cause of the phenomenon before we did so ourselves. We were the last to understand it.

that the Prussian General Staff was born. It arose from the dropping of "the old fencing and antiquated methods"; from the conscientious study of Napoleon's battles, considered not as acts of barbarity but as the *only means* of warfare in the truest sense of the word.

Let us profit by this. Let us begin, as they did, by setting aside the "*ancient processes*," the fancy for "*old fencing*," the "*antiquated methods*" which were upset by the wars of the Emperor. His enemies maintained them—to their own misfortune—until finally, taught by experience, the Allies in 1812, 1813, 1814, learnt (to the glory of their arms) how to make war *national* in principle, and how, in practice, to make it a war of *movement* and of *shock*.

To us, at this moment of history, in the midst of modern Europe, that old fencing and those antiquated methods are illustrated by a certain kind of warfare in which there is no decisive solution, nothing but a limited end—a warfare consisting in manœuvres without fighting, submitted on the other hand to absolute rules, of which I will here give a few typical instances:

Joly de Maizeroy gave the following definition of war: "The science of war consists not only in knowing how to fight but *even more in avoiding* the fight, in selecting posts, in directing the marches so as to reach the *goal* without committing oneself, . . . so again as to decide to fight a battle only when it is deemed indispensable." To defer, to put off, such is the formula.

We again come across this "*war without battle*" in the pages of Massenbach, who considered it the supreme form of the military art and said in particular, referring to Prince Henry, brother of Frederick, and thinking he was speaking highly of that Prince:

"He knew how to conquer fortune by bold marching; more successful than Cæsar at Dyrrachium, greater than Condé at Rocroy, he, like the immortal Berwick, achieved *victory without fighting*."

Therefore a man of his time! To him manœuvres, positions are the whole of warfare. No wonder we see him act in 1806 as a great inspirer of disastrous schemes; more particularly when he thought that the salvation of the Prussian army lay in the position of Ettersberg near Weimar. Thither did he urge the remnants of

the army flying from Jena to repair; as if that hill could have possessed in itself, without a strong army to hold it, the power of stopping the victorious flood of the French!

Again, the same kind of warfare was characterised in the following way by Marshal de Saxe himself, albeit a man of undeniable ability: "I am not in favour of giving battle; especially at the outset of a war. I am even convinced that a clever general can wage war *his whole life* without being compelled to do so."

Entering Saxony in 1806, Napoleon writes to Marshal Soult: "There is nothing I desire so much as a great battle." The one wants to avoid battle his whole life; the other demands it at the first opportunity. Further, these theories have the vice of building up magnificent systems on the mere properties and intrinsic value of ground.

Again, we see Schwartzemberg, in 1814, proceed by Bale, run up against the obstacles of Switzerland, completely isolate his own army and expose it a hundred times to the striking blows of an even disarmed Napoleon, face all these risks, in order to secure the advantage of entering France through the Langres plateau; because the Langres plateau gives birth to the Marne, the Aube, the Seine, etc. . . . and constitutes (geographically) the *strategical key* to France. Blücher's judgment about this view is well known.

To be brief, the idea of a result to be obtained by conquering had totally disappeared from all these conceptions. The notion of *force* had been replaced by the notion of *figure;* the *mechanics* of war had become the geometry of war; *intention* stood instead of *fact; threat* instead of *stroke*, of *battle.*

"The mistake made was the giving to war as its object the execution of nicely combined manœuvres, instead of the object of annihilating the adversary's forces. The military world has always fallen into such errors whenever it has abandoned a simple and straightforward notion of the laws of war and attempted to *make abstraction of matter*, neglecting thereby the natural trend of things and the influence of the human heart over human plan" (von der Goltz).

Such a formalism also leads to *pedantry*. The Austrian Generals, after they had been beaten by Bonaparte, were heard to exclaim: "It is not possible to disregard,

as much as does this man, Bonaparte, the most essential principles of the art of war!"

These are precisely the views we must neglect in the Europe of to-day; we, who are the successors of the Revolution and the Empire, the heirs of the art which was newly born on the ground of Valmy, which astounded old Europe, surprised in particular Marshal von Brunswick, a pupil of the great Frederick, drew from Goethe, in presence of the immensely expanding horizon, that profound cry: "I tell you, from this place, and from this day begins a new era in the history of the world." The wars of the kings were at an end; the wars of the peoples were beginning.

These words were addressed by that philosopher to the officers of Saxe-Weimar around the bivouac fires, before Valmy, in the evening of September 20, 1792.

"The French Revolution," said Clausewitz, "had given to politics and war another character, which the great Frederick had not foreseen; for it is impossible to know, on the eve of any great event, what direction things will take.

"By the strength and energy of its principles, by the enthusiasm with which it enraptured the people, the French Revolution had thrown *the whole weight of that people and all its forces* into the scale which had hitherto nothing but the weight of a *limited army* and of the *limited* (*regular*) *revenues* of the State.

"Paying little heed to the calculation of political alliances whereby cabinets anxiously weighed war or alliance, a calculation which weakened the force of the State and subordinated the brutal element of fighting to the reserves of diplomacy, the French army went haughtily forward through the countries and saw, to its own surprise and to that of its opponents, how superior are the natural force of a State and a great and simple motive to the artificial diplomatic assemblage in which these States stood mutually involved."

He added: "The prodigious action of the French Revolution is certainly less due to the use of new military methods, than to a wholly transformed political and administrative system, to the character of the government, to the state of the nation, etc. . . . that the other governments did not know how to appreciate those new conditions, that they tried to meet by ordinary

means a display of overwhelming forces, this was the source of all their political errors."

Truly enough, a new era had begun, the era of national wars, of wars which were to assume a maddening pace; for those wars were destined to throw into the fight all the resources of the nation; they were to set themselves the goal, not a dynastic interest, not of the conquest or possession of a province, but the defence or the propagation of philosophical ideas in the first place, next of principles of independence, of unity, of immaterial advantages of various kinds. Lastly they staked upon the issue the interests and fortune of every individual private. Hence the rising of passions,[1] that is elements of force, hitherto in the main unused.

Remember Bonaparte's first proclamation[2]: "Soldiers, you are naked, ill fed, the government owe you much, they can give you nothing. Your patience, the courage you show amid these crags, are admirable; but they secure no glory for you, no splendour shines on you. I will lead you into the most fertile plains of the world. Rich provinces, great towns will be in your power. You will find there honour, glory and wealth. Soldiers of the Army of Italy, can you now lack courage or steadfastness?"

He knew well the French weakness: lack of steadfastness.

And then, from the summits of the Alps to the Appennines, comes one answer shouted by the depleted battalions of our hungry soldiers: "Forward!" The new war is launched. Henceforth it will be waged with the soldiers' heart.

It is truly a new era, that of *the struggles of the peoples*, of wild and tragical struggles, the records of which were to be written, first by French arms. Later they were written by our enemies; the dreadful landmarks of whose reaction were to be named: Saragossa, the Kremlin, Leipzig.

Do you now catch the antithesis of these two epochs?

On one side, an extreme utilisation of human, ardently impassioned, masses; an absorption of all the activities of society; an entire subordination to the

[1] Already, in the past, the most violent contests had been caused by the religious wars, which were wars for an idea.

[2] To the Army of Italy in passing the Alps.

needs of the hour of the material parts of the system, such as fortification, supply, use of ground, armament, billeting, etc.

On the other side (eighteenth century), to the contrary, a regular and methodical utilisation of those material parts which become the bases for various systems; for systems which would of course change with the moment, but would none the less always tend to make such a use of the troops as to spare the army, the capital of the sovereign: an army not really caring for the cause for which it is fighting, though not lacking in the professional virtues, in particular, of military spirit and honour.

In that latter case, the very matter of war suffers "abstraction." This abstraction determined the conduct of the fighting men, albeit living and thinking beings, and this in order to fix the rules of an art which is bound under such a system to remain second-rate. It is much as if a painter should ask his brush to supply him with inspiration or to fix a limit to his talent, whereas the true end of that instrument is but to express ideas supplied by a genius outside itself.

The fancy for "old fencing," for "antiquated methods," for "ancient processes," periodically reappear in peace-time among those armies which do not study history and therefore forget the very thing which above all gives life to war: namely *action*, with all its consequences.

The undeniable reason for this is that all these systems are wholly based on things you can touch in peace-time, on the *material* factor which keeps all its importance in mere drill and manœuvres, while in peace-time the *moral* factor cannot be either clearly grasped or made use of.

For instance, the battle of the Alma or any similar one, if it were reproduced in the course of manœuvres, would turn out a Russian victory and a French defeat; the ground demands such a result. You would conclude: escarpments of such a nature as those of the Alma being insurmountable, it is useless to guard them.

Such and such a percentage is attained by rifle-fire against a target; such and such are the effects of artillery. Therefore attack must be utterly incapable of success. The conclusion drawn from this would be

that you must yourself avoid attack, and await for that of your adversary: go back to the war of positions and skilful manœuvring; starve your enemy of supplies by outflanking him, etc. At each improvement in armament you would have to return to the defensive.

Now the same problems, if studied in the book of history, suggest an exactly contrary answer.

The battle of the Alma was undeniably a French victory. It follows therefrom that any ground may be successfully stormed by the enemy if it is not defended by rifle-fire, that is by watchful and active men.

Any improvement of firearms is ultimately bound to add strength to the offensive, to a cleverly conducted attack. History shows it, reason explains it.

For, if rational tactics have always finally consisted, on the offensive, in assembling on a given spot more rifles and more guns than the enemy, it cannot be denied that such tactics would assemble to-day on that spot better rifles and better guns, and that the advantage of the assailant would thereby be increased. Nothing is easier than to give a mathematical demonstration of that truth:

Suppose you launch 2 battalions against	1	
You then launch 2000 men against	1000	
With a rifle-fire of 1 shot to a minute, 1000 defenders will fire	1,000	bullets.
With the same rifle, 2000 assailants will fire	2,000	,,
Balance in favour of the attack	1,000	,,
With a rifle firing 10 shots a minute, 1000 defenders will fire within 1 minute	10,000	,,
With the same rifle, 2000 assailants will fire	20,000	,,
Balance	10,000	,,

As you see, the material superiority of fire quickly increases in favour of the attack as a result of improved firearms. How much more quickly will grow at the same time the ascendancy, the moral superiority of the assailant over the defender, of the crusher over the crushed. Evidently enough, the attacking force will have to be more careful while pushing forward and engaging entirely their 2000 men, their 2000 rifles; they will nevertheless keep the final superiority, even from the point of view of mere fire.

People are often inclined, though they may be following history, to ascribe to purely material causes the great results of a given war. "The French people," writes von der Goltz, "have in all times been masters in matters of formality. They scrupulously followed the war of 1866 and tried to explain the Prussian victory merely by the superiority of Prussian armament. While thus looking at the external side of Prussian military power alone, they acted in the same way with regard to the means which were to be used against it. It became to the French army an article of faith that you must utilise to the utmost the power of armament and keep to an absolute defensive. They thought that the offensive strength of the Prussian army would fail to break a defensive action relying upon their new and terrible firearms. Our adversaries did much more in developing this system than had previously been done by any other army, and yet they failed to secure victory.

"For they ruined by that doctrine the spirit of their own army. External form, the increase of material power actually attained, could replace neither the moral strength that was lost nor the confidence that was shaken by a defensive doctrine. This it was that turned the scales. *Whatever is done within an army must always aim at increasing and strengthening its moral force.*"

Failing the conscientious following of history's lessons, peace-time instruction is bringing us slowly, but surely, back to the "old fencing," by virtue of the omnipotence falsely ascribed to material power.

The French of 1870, just like the Prussians of 1806, are a proof of this truth. In both cases, as von der Goltz puts it, "when the enemy becomes threatening, strategists give themselves up to the *study of the ground*, establish *imaginary plans of campaign* and look for *positions* which they may or may not discover."

Is this not the very summary of our last war and its pitiful history?

1. Positions: there is Cadenbronn, there is Froeschwiller, there is the forest of Haye, all of which are supposed in turn to ensure the country's salvation.

2. Imaginary plans. We decide that the Rhine must be passed: where, when, how, with what means? It does not matter. The junction with the Austrians will

be made in Bohemia. They believe they can *deposit military plans at a solicitor's.* They believe any combination to be valid by itself, independently from circumstances of time, place, goal to be reached. It reminds one of a lawyer preparing what is called an "omnibus" speech, a speech suitable to any possible case.

3. The notion of battle has totally disappeared—and it has disappeared because people believe they can do without it, because they believe they can, like the immortal Berwick, earn victory without fighting—that when troops are being led into the fight, it is from a skilful handling of these troops, mutually related to each other, from a perfect way of falling in, from some new formation or general disposition, that success will come. A battle is prepared for as if it were a *parade ;* no mention is made either of the enemy, or of blows to be delivered (see the orders for the battle of Champigny), or of the hammer that must strike the blow. No mention is made of the use of Force.

These erroneous considerations will frequently reappear, without your knowing it, in your own decisions; they will call forth my criticism whenever you undertake *outflanking* operations or operations on the *rear* of the enemy which will draw all their assumed value from the mere *direction* in which they will be made; whenever you undertake to *threaten without attacking ;* whenever you resort to mere *plans, geometrical drawings,* as if certain dispositions, certain figures possessed a virtue in themselves.

All this is as flimsy as a paper wall.

You cannot push a staunch adversary back by means of a skilfully selected direction. You cannot even stop him without really attacking, any more than a paper wall can prevent rain and frost from entering a house.

Being positive in its nature, war, which we are about to study, only admits of positive solutions. There is no effect without a cause; if you want to produce an effect, you must develop the cause; and in war you must apply *force.*

If you want to push the enemy back, *beat him ;* otherwise, nothing is done; and there is only one means of doing this : namely *fighting. No victory without fighting.*

"Blood is the price of victory. You must either

resort to it or give up waging war. All reasons of humanity which you might advance will only expose you to being beaten by a less sentimental adversary" (Clausewitz).

Now that we have seen how war must *not* be made and compared the obsolete war of the eighteenth with that of the beginning of the nineteenth century, let us study the war we have to prepare.

Let me first show you that this war possesses in a singularly enhanced degree a national nature which is bound to produce a more intense form of warfare.

"The war of 1870 will be child's play compared with that of to-morrow," said Bismarck.

War became national in the first instance as a means of conquering and guaranteeing the independence of each existing nation. (French of 1792–3, Spaniards of 1804–14, Russians of 1812, Germans of 1813, Europe of 1814.) It was marked at this stage by those glorious and powerful manifestations of national passions which are named Valmy, Saragossa, Tarancon, Moscow, Leipsig, etc.

Later on, war, though still national, was made with the object of acquiring by force *unity* of races, *nationality*. This was the thesis of the Italians and Prussians in 1866, 1870. This will be the thesis in the name of which the King of Prussia, made Emperor of Germany, will claim the German provinces of Austria.

But we find to-day a third kind of national war arising, bent on conquering economic advantages and advantageous treaties of commerce for each nation.

After having been the violent means by which peoples enforced their own admittance into the world of nations, war is now becoming the means they use to enrich themselves.

"Modern wars have become the nations' way of doing business. Nations have their interests as have individuals. National egotism cannot be separated from national greatness" (von der Goltz).

National egotism, national greatness, such are the words which are now connected in policy; such are the emotions from which war arises:

A war of interests { less and less *interesting*, / more and more *interested*,

having as object the wealth of nations. What wealth?

The wealth of nations has undergone the same change as that of individuals. It used to be, and still is in some absolute monarchies, a *landed* wealth. It has become largely *personal* wherever the State is based on national representation and parliamentary government. Wealth has become based on a piece of paper: with the individual, a bond; with the nation, a treaty of commerce.

The means for a nation to obtain wealth and satisfy its cravings is found in waging war. Here is the proof:

By their victories of 1870–71, the Germans have no doubt secured for themselves a mere territory: Alsace-Lorraine; they have, however, also secured a new political position, the rank and situation of an Empire, that is, of a great Power of fifty million inhabitants with corresponding influence in Europe—of an Empire which provides everyone of its subjects abroad with a better situation, and ensures outlets to German industry and commerce; for industrial orders always follow on any *success*—even a military success.[1]

The Germans also secured from France "most favoured nation treatment" as regards tariffs and commerce; that is, the means of introducing into this country, under favourable terms, the products of their industry as well as the means of absorbing our wealth. It is an advantage to all the Germans, which shows well enough that a nation's wealth largely consists, nowadays, in drawing an income from its neighbour.

Thus *general interests*, as safeguarded by victory, no longer differ from the sum of *individual* interests.

The German victories of 1870 have enriched the individual German. Every German has a *share in the profits*, and is directly interested *in the firm, in the constitution, and in victory. That is what is now meant by a people's war.*

Moreover, what have the Germans made of Alsace-Lorraine? They have made it an imperial territory, the very cement of unity under Prussian leadership, involving an obligation for all the confederates to take up arms if the western neighbour should cross the border and imperil the profits secured.

[1] The British, who are experts in business, truly say: "Trade follows the flag."

Here is another proof: the Chinese and Japanese War.

After numerous and undeniable victories, Japan signed at Simonozacki a treaty by which they secured meagre territorial concessions but at the same time enormous commercial advantages, in particular the right to penetrate China, a right which, besides providing them with certain undisputable moral advantages and with an undeniable political influence over the whole of the East, also ensured the development of their own market.

The guns of Wei-hai-wei and of the Jalu paved the way for a mercantile navy which would export, first to the Eastern seas, then to the Western, articles which Japan manufactured under conditions no longer possible in Europe.

The Russo-Japanese War (which was entirely inspired by German methods in its preparation and execution) supplies us with a small-scale, but none the less complete model of the nature of contemporary warfare; for war, to-day, is a commercial enterprise undertaken by the whole nation. It concerns the individual more directly than did war in the past, and therefore appeals much more to individual passions.

Further proofs: the Spanish-American War; our own last difficulties with the British over Fashoda. What were we all seeking? For commercial outlets to an industrial system which produces more than it can sell, and therefore is constantly smothered by competition. What happens then? New markets are opened by force of arms.

"The Stock Exchange has acquired such an influence that it is able, in order to protect its interests, to launch armies into war" (von Moltke). Who was responsible for the Boer War? Certainly not the Queen of England, but the merchants of the City.

National egotism, breeding self-interest in politics and war, and making war a means of satisfying the growing cravings of the nations, these nations therefore bringing into the fight a growing concentration of passion; a more and more excessive feeding of war, including the use of the human factor and of all the resources of the country—such is the picture of modern warfare. It was truly said, then, that "Nations are

like men who prefer losing their life to losing their honour and who prefer staking their last resources to confessing themselves vanquished. Defeat is the ruin of *all*" (von der Goltz). Such are the origins of modern war. Here is its moral: you must henceforth go to the very limits to find the aim of war. Since the vanquished party now never yields before it has been deprived of all means of reply, what you have to aim at is the destruction of those very means of reply.

What, then, are the means of furthering this more and more *national*, more and more *interested*, more and more *egotistic* policy; of furthering a more and more *impassioned, violent* war?

"Mobilisation nowadays takes up all the intellectual and material resources of the country in order to ensure a successful issue" (von der Goltz).

All resources: a noteworthy difference with previous systems of recruiting (such as enlistment, drawing of lots, substitution, etc.), which, even under the Revolution and the Empire, left unused a great number of citizens.

All *intelligent* resources: while previous systems allowed the wealthy and educated part of the nation to escape.

Moreover, mobilisation takes men already *trained* to military service; they have all previously gone through a course of military training, while the mass-levies of 1793 or the German landwehrs of 1813 embodied unexperienced men only.

Therefore, while being more considerable in numbers and better trained, the modern mass is also more sensitive.

The human factor already possessed an undeniable predominance over the material factor at the beginning of the nineteenth century. Is it not clear that this predominance is still growing in every way?

But, again, the army we propose to set up is not a professional army. It is an army of civilians belonging to all callings, to all ranks of society, and wrung from their own people: which callings, society, people, cannot indefinitely do without them. War brings discomfort, puts everywhere a stop to life. Hence the

consequence that such war cannot last long, that it must be conducted with violence and reach its goal quickly; otherwise it will remain without result.

It may be stated, then, that such features as war already possessed at the beginning of the nineteenth century are still more marked at the end of the century: a national war; a war of numbers; a war violent and at quick march.

Such being the terms of our study, where shall we study war save in that period of the Revolution which, from its start, raised to so high a level the *goals* ascribed to war, the *means* (number, enthusiasm, passion) devoted to its furtherance? Where save in the acts of Napoleon, that matchless genius, who came on after, who utilised a military situation already produced and showed how genius could, in the first place, work with human emotions; in the second place, manœuvre masses of men; in the third place, conduct military operations at the highest potential ever known.

You may accept such a conclusion. But it is hardly possible to grasp its contents without knowing whence it was derived.

A soldier cannot afford to ignore either the origins or the goal of war, or the nature of the means placed at his disposal by war, for it is by studying all these factors that he will determine how to *make use* of those means, what tactics he must adopt, what is the value of the results he is aiming at. A war not only arises, but *derives its nature*, from the political ideas, the moral sentiments, and the international relations obtaining at the moment when it breaks out.

I will draw an illustration from the fundamental changes which the armies of Europe that fought Napoleon had to undergo in order to achieve victory.

"Little by little," said Rustow, "every Power built up a national army intimately connected with its own country. *Then only* did all the armies take up for themselves all the changes wrought in the art of war by the French Revolution; while the *spirit of the new art of command* showed itself everywhere and assumed appropriate forms." (The spirit he was alluding to was the end of cunning, of subtlety, of threats, of manœuvres without fighting; it resorted to blows, to fighting, and it involved the unlimited use of human material. "The

tactics of a definite result" to be arrived at by the unsparing use of force.)

"Until that moment," he added, "people might *imitate the new forms given to war, but they could create nothing. Napoleon's campaign was copied, but without result.*" (To manœuvre by the right or the left does not in itself lead to success, a manœuvre in itself = 0. In order to create, you must have artistic adaptation of the means to the end, an adaptation which involves a very clear knowledge of the means and of the end: in other words, you cannot create anything before knowing the component elements of art.)

"But when Spain, Russia, Germany rose, they discovered at once that *form* of war which suited each of them. All these national armies had certain common features and quickly got hold of the new forms which France had brought into strategy."

This amounts to saying: try and know *why* and *with the help of what* you are going to act; then you will find out *how* to act.

"In presence of this cardinal fact of *national risings* against France, all the other causes of Napoleon's repeated defeats are insignificant. The reason why he no longer appreciated with accuracy the forces in conflict, was largely because he had never thought of the possibility of a national rising among his enemies; when he had suddenly to face such a rising, he did not know how to fight it. He could no longer neglect, as he had done when opposed by the antiquated system of his adversaries (1805, 1809, Italy), the old maxim of Rome: never to wage two wars at once."

The enlightened soldiers and German patriots of 1812–13 had discovered how to hold their own against the French armies by studying the occasionally victorious resistance which Vendée and Spain, acting alone, had furnished. From that study they had deduced processes which, once transferred from the Bocage of Vendée, or from the hilly ground of the Peninsula into the plains of Northern Europe, proved totally inapplicable or powerless. The principle of national rising had, none the less, survived. They had, therefore, only to determine the forms of war which suited best their own temperament and country in order to attain the results we know.

Conversely, the misappreciation of "the nature of the subject" explains, to a large extent, the impotence of our armies on the Loire in 1870–71. The mass-levy, revolutionary in its essence, decreed by the dictator Gambetta, ill suited a certain type of mind which issued from the imperial armies and had been trained to expect little more than order, method and perfect regularity in an armed force.

To take a more immediate example; it is in the same spirit that fighting in open order (*ordre en tirailleurs*) may be understood as a normal form of fighting and as having to be rationally and quite soundly developed until it becomes that "rush of a team" which turns a modern battle into a struggle between armed crowds.

It is doubtful whether such methods can be applied with success where the private has no direct interest in war and is not the true defender of a national cause.

It is not likely that such methods would succeed where you have an army of mercenaries, or of old soldiers, as in the case of the present [1] English army, which necessarily makes an appeal to steadfastness and discipline in the ranks in order to make up for the moral qualities of man, for individual valour and initiative; the same applies to an army, such as the Austrian, composed of various races, of heterogeneous elements, each with distinct aspirations.

Now, what arguments shall we find for this new sort of war, more and more national in its origins and ends, more and more powerful in its means, more and more impassioned; a war which does away with all systems founded on positive quantities; ground, position, armament, supply; a war which consigns to the background the possession of territory, the capture of towns, the conquest and occupation of strong positions. What arguments are the supporters of such a war to use? Failing the systems they discard, what methods do they propose to use? What conduct will they adopt? What will be their starting-point and what their end? By what principle shall such war live?

As we have already seen, and, for general reasons

[1] 1900.

explained above,[1] it is to the theory of *decision by arms* that war is now wholly returning; one can now apply no other. Instead of condemning Bonaparte's battles as acts less civilised than those of his precedessors, this theory considers them as the only efficient means; it seeks to repeat them by seeking the same sources of action as he had.

We find ourselves, for the war we presuppose, in presence of an adversary who has the same idea of fighting, who takes up arms for an idea, a principle—a change of tariff, for instance: no matter what the end so that it be a policy to be attained. Invasion or occupation of territory will therefore trouble him very little; these operations cannot be the end of the war. He intends, moreover, as do we, to back his political and financial theories by force. He will only renounce those theories when he has been deprived of the means of defending them. He will only confess himself beaten when he is no longer able to fight; that is, when his army shall have been materially and morally destroyed.

Therefore modern war can only consider those arguments which lead to the destruction of that army: namely *battle, overthrow by force.*

"Bonaparte always marched straight up to the goal without troubling in the least about the strategical plan of the enemy; knowing that *everything depends on tactical results and never doubting that he would get them, he always and everywhere sought an opportunity for battle*" (Clausewitz).

To seek out the enemy's armies—the centre of the adversary's power—in order to beat and destroy them; to adopt, with this sole end in view, the direction and tactics which may lead to it in the quickest and safest way: such is the whole mental attitude of modern war.

Let us therefore give up talking of manœuvres devised *a priori* to reach the enemy's communications, to get hold of his stores, to enter such and such more easily accessible part of his territory; none of these results affords any advantage by itself; it can only be of use if it leads to fighting under advantageous tactical

[1] The similarity between to-day's situation, means and end, and those at the beginning of the century leads to and restores the same conduct of war.

conditions, if it permits the most favourable utilisation of our forces.

Tactical results are the only things that matter in war. Nothing but decision by arms makes an award possible, for such a decision alone makes a *victor* and a *vanquished;* alone does it modify the respective situation of the opposing parties, of which one becomes the master of his own acts, while the other has to submit to the will of the adversary. Where there is no battle, there is no award, nothing is accomplished. Valmy proves it. Dumouriez finds himself in Sainte-Menehould. Is he outflanked? He is, for he finds himself cut off from direct communications with Paris; he resorts to indirect communications. But there has been no decision by arms, no tactical result. He decides that nothing is yet concluded: he does not withdraw. When he is attacked, he defends himself. As he is not beaten, it is the enemy who are beaten, for they have failed at the bar of battle.

No strategy can henceforth prevail over that which aims at ensuring tactical results, victory by fighting.

A strategy paving the way to tactical decisions alone: this is the end we come to in following a study which has produced so many learned theories. Here, as everywhere else, as in politics, the entrance upon the stage of human masses and passions necessarily leads to simplification.

"Although one may follow many roads in war, fighting is the only means of reaching the end. Everything in war constantly remains subordinated to decision by arms, which alone in the last instance pronounces judgment. Once your adversary seems decided to resort to that supreme jurisdiction, you must of all necessity follow him in his appeal (unless you are certain he does not intend to proceed). To adopt from the start a more cautious line of conduct is to risk losing the case. . . . War has but one means at its disposal, namely fighting. . . . Therefore, whichever system is adopted, be it offensive or defensive, it is always and necessarily tactics which decide the issue. And all strategical combinations must aim at reaching tactical results, for these alone are the fundamental cause of every successful solution. . . ." (Clausewitz).

As, then, strategy does not exist by itself, as it is

not worth anything without tactical efficiency, as tactical results are everything, let us see out of what those results are made.

There, again, " modern war proceeds from Napoleon's views, as he was the first to throw light on the importance of preparation and on the omnipotence of *mass* multiplied by *impulsion*, with the object of breaking, in a battle sought from the outset of the war, the moral and material forces of the adversary " (Clausewitz).

Later on, when we shall study force in action, we shall reach by mere reasoning that very same way of conceiving battle : the necessity of organising a shock both supreme and final.

Let us for the moment keep to the synthesis we can deduce from history. It is characterised by three things : preparation ; mass ; impulsion.

Preparation in modern war is more necessary and must be pushed further than in the past.

Unless one acts thus, one is forestalled and outdistanced by the adversary. One thing alone is of import : the point of preparation reached at the actual outbreak of war.

It is not by months, or weeks, but by days and hours that the progress of these preparations has now to be measured. The results of mere moments in this matter reach very far.

" A three days' advance in the French mobilisation," wrote von der Goltz, " would enable the French to surround Metz and Thionville, to cut the communications of Strasburg, and to reach the Sarre before the Germans could resist. The latter would then be compelled to withdraw their point of concentration back to the very ground where it took place in 1870—that is, on the Rhine."

The same is true of the *place of assembly*, located as near the frontier as possible. It is quite obvious and certain, for instance, that Château-Salins is sixteen miles distant from Nancy, also that Nancy is occupied by a strong French garrison, that, therefore, considerable German masses will be concentrated, in the very first moment of a war, around Château-Salins.

Thus the nature of the napoleonic preparation has been, so to speak, reinforced ; it has been reinforced to

such a degree that the results of the first operations have been both hastened and made crushing and final.

The necessity of pushing preparation as far as possible is to be found in the conduct of any tactical operation you may have to study, the object being not to be forestalled by the enemy, as well as to avoid mistakes in the field, with the tragic sacrifices these involve from the ruthless efficiency of modern arms.

Let us now turn to tactical action.

In what does it consist? There is but one means of treating with the adversary, namely to *beat* him, and therefore to overthrow him. Hence the idea of a *shock* composed of two terms: *mass* and *impulsion.*

We have mentioned *mass;* it absorbs in modern warfare all the physical and moral forces of the country. The same will be true of any tactical operation, however small it be. The greatest part of our forces, if not the whole, will be reserved as a *masse de choc.*

As for *impulsion,* a new idea brought into war, it unavoidably carries with it the idea of *movement.* Tactics on the battle-field will be the *tactics of movement.*

The last word of offensive or defensive fighting will be therefore: the troop in *movement*—that is, attacking.

But before launching troops into battle, can they be at least conceived as being in another situation than movement? No. The theory which aims at achieving the *strongest possible shock* prescribes to strategy as a primordial condition to *bring to the point of shock all* available troops. It is by movement that troops assemble and prepare for battle. Movement governs strategy.

May we not stand and await that shock? Of course not. If we did not seek it, it might well either not occur at all, or occur under bad conditions; we might then fail to destroy the forces of the adversary, which is in war the only means of reaching our end.

You must seek the shock; hence a new set of reasons for movement: movement in order to *seek* battle; movement in order to *assemble* one's forces on the ground; movement in order to *carry out* the attack.

Such is the first law that governs the theory, a law from which no troop can ever escape and which has been expressed by the military formula: of all faults, one only is degrading, namely *inaction.*

Combined with the idea of shock, this law makes the conduct of troops a *working of forces*, within *time* and *space*, that is a piece of *mechanics*.

But while one thus moves in order to *seek* battle, to *prepare* for it, to *carry it out*, all this is done against an adversary himself in movement.

The mere mechanics of our own forces therefore produce a highly complex dynamic problem, in which one term is known: namely the situation and size of one's own forces; while the other, namely the enemy's situation (in size, direction and trend), is but vaguely known: a consideration which shows how limited in war is the power of mathematical combination.

That mobile and unknown enemy must first be *discovered;* then *reconnoitred;* then *fixed*, or pinned, so that the play of our forces may strike him. Hence a first series of *detachments with special missions*, which have to *manœuvre* if they would carry out those missions.

But an unbeaten adversary retains his freedom to act as much as we do. That combination of forces we are trying to set up must therefore be *guarded* against his attacks, which, otherwise, would prevent us from marching, assembling, and striking. Hence the necessity for a service of security; that is, of other *detachments* which will have to *manœuvre* in their turn.

But, again, at the very time during which we are attempting to *concentrate*, we try to maintain *dispersion* among the enemy; at the very time we attempt to keep our freedom of action in order to carry out our plan, we are trying to deprive *him* of *his* freedom of action in order to strike him: another reason for creating yet another series of detachments.

Thus the simplified notion: "approach battle with the main body of your forces," involves:

(1) The obligation of *always* keeping that main body at one's disposal, and also of manœuvring it, which is a matter of course.

(2) But at the same time the obligation of supplying numerous detachments all destined to enable the main body to function, having, therefore, to perform a subordinate part, and compelled to manœuvre too. A circumstance which, to begin with, implies, at least seemingly, dispersion, the very reverse of the concentration which was sought.

We shall see, in the course of the next lecture, how the principle of economy of forces gives us the means of reconciling these apparently contradictory conditions; to *strike with an assembled whole*, after having supplied *numerous detachments.*

I shall have reached my aim to-day if, after showing you what theories must be dropped, I have made you grasp the singularly reinforced nature of war at the end of the nineteenth century: a more and more national war; more and more considerable masses; ever-increasing predominance of the human factor; hence a necessity for going back to that conduct of troops which aims at battle as at the final argument; which manœuvres in order to reach that goal; a conduct characterised by: *preparation, mass, impulsion.*

As for these last features, they go so deep that they stamp themselves on all the acts of war, however insignificant. No action will be well conducted on your part unless it answers three conditions:

Preparation: there must be in your mind a *plan* of action, based on a thorough study of the task or mission assigned, as well as on a detailed, minute examination of the ground; a plan liable, of course, to alteration. You must have troops disposed and drawn up so as to be able to prepare and undertake the execution of that plan; so that you may be able, so to speak, to express it: advance guards and flank guards in particular:

Mass: that is a main body, as strong as possible, assembled, kept in hand, available for carrying out the execution of the plan:

Possibility of multiplying that *mass* by *impulsion:* that is, of finally hurling that mass, more or less scattered at first, later on regrouped, with all the means it possesses: guns, rifles, bayonets, swords, appropriately used; of hurling it *as one whole* on *one objective.*

CHAPTER III

ECONOMY OF FORCES

' The art of war consists in always having more forces than the adversary, even with an army weaker than his own, on the point where one is attacking or being attacked."—NAPOLEON.

As we have previously seen, modern war knows but one argument: the tactical fact, battle. In view of this it asks of strategy that it should both bring up *all available forces* together, and engage in battle *all these forces* by means of *tactical impulsion* in order to produce the *shock*.

This theory dictates both the movements and the manœuvre of each task.

But at the very time one is thus seeking such a battle of concentration

one discovers the necessity of supplying detachments in order to:

- discover the enemy;
- reconnoitre the enemy;
- fix the enemy;
- cover and protect one's own concentration;
- keep the enemy scattered;
- prevent the enemy's concentration.

While theory, then, prescribes *concentration*, execution carries with itself *dispersion*, at least by involving the setting up of numerous detachments. Does this not prove theory to be impracticable?

The same theory appears to be even less practicable when the movement of forces is being taken into account.

It is easily conceivable that one should have managed to bring to the same battle, to the same place, at the same time, an army such as that of Turenne or Frederick, provided with tents and stores. Such an army could move as one block. Its not very numerous elements could easily march and arrive together; and this in

presence of an enemy in position, whose strength partly lay in his very immobility, and who therefore gave you the time to assemble your columns and deploy them methodically. To-day, however, with an establishment which at the first grouping comes to more than one million of men, the army cannot march, live, be housed, without spreading far and wide. It divides itself into numerous lengthy columns. The space occupied in front and depth is immense.

Two army corps marching on the same road, one behind the other, represent in their fighting elements alone a length of about forty miles. To deploy them on a front in line with the head of the column is an operation which requires nearly three days. Conceive what depths are involved by the presence of a second-line army behind the first-line army!

The same is true of the extension of the modern front.

The three German armies of 1870 which Marshal von Moltke intended to throw into *the same battle*, on August 9th, on the Sarre, had, even by August 4th, a front of sixty miles.

There is no exaggeration in foreseeing an initial extension in the future of from sixty to ninety miles. How, then, can theory, in face of *such an extension*, aim at organising battle on the basis of *unity of space?*

The same applies to time. In presence of a manœuvring adversary, how is it possible to secure the long days necessary for the lateral columns to join the central ones, for the rear of the columns to close on the front?

The same, again, is true of *manœuvre*. How can you find time to-day to develop it in face of an enemy who does not stand on a position but attacks?

Again, the same is true of *battle*. Is there any means of conducting an action which involves such numbers and is undertaken on such a scale in space?

Must we not leave everything to *luck*, to improvisation, to everybody's initiative, to the private's valour?

Does not, then, that art of war which had been thought to have become a *great* art after all the resources of the country had been placed at its disposal, does not such an art become the *negation of art*, that is, an *impotence to create?*

This was the view of the eighteenth century, and

thence sprang the conception of a *maximum army:* one should not handle more than a certain number of men; beyond that limit disadvantage would grow at a quicker rate than advantage.

But, then, will not such a war—a war which admits of none but cruel arguments, which rejects the elegant and elusive manœuvres of the eighteenth century and only recognises one means of reaching its end, namely *bloodshed*—will it not, in view of the apparent impossibility to direct it, hark back to the confusion of the barbaric invasions?

No, it will not. The object of to-day's lecture is to establish the existence of a superior principle which enables us to achieve, even with considerable numbers, even against a manœuvring enemy, that handling of the forces which theory demands; to portion them out in time and space and to employ them in both ways—of the mass and of detachment—so as finally to succeed in applying them, strategically as well as tactically, *together on a given spot;* on the basis of *unity of time* and *unity of space.*

Those conditions will always ensure the greatest possible efficiency.

This superior principle, which we call *the principle of economy of forces*, arose during the period of the Revolution contemporaneously with the difficulties it was designed to meet.

What, then, is the principle of economy of forces?

A mere definition will not serve us.

There is a proverb which says: "You cannot hunt two hares at the same time"; you would catch neither of them. You also have the Roman Senate's old maxim: "You cannot wage two wars at the same time." Effort must be concentrated. Frederick was commending the same principle when he wrote: "You must know how to lose opportunely, to sacrifice a province (who wants to defend everything does not save anything), to march in the meantime with *all* one's forces against the opposing forces of the enemy, to compel them to fight, to make the greatest possible effort to destroy them; then send out detachments to meet the remainder of the enemy's forces."

That is not all.

Those who would say at this stage, economy means

sparing one's own forces, being careful not to disperse one's own efforts, would only state part of the truth. Those would come closer to the truth who would assimilate it to the art of knowing how to spend, to spend in a useful and profitable way, to make the best possible use of available resources.

It is easier to understand what our principle is *not*.

" Suppose," as Rustow puts it, " an individual who, in the administration of his income, should divide it into four equal parts : one for housing, one for clothing, one for food, one for petty entertainments. He would always have too much on one side, and, above all, too little on the other."

This is called in financial matters the *specialisation of credit*, which is incompatible with all kinds of speculation and therefore with all kinds of large benefits. This is the theory of *fixed, invariable repartition*, which will always be beaten by the theory of *available reserves*.

The principle of economy of forces is the art of pouring out *all* one's resources at a given moment on one spot; of making use there of *all* troops, and, to make such a thing possible, of making those troops permanently communicate with each other, instead of dividing them and attaching to each fraction some fixed and invariable function; its second part, a result having been attained, is the art of again so disposing the troops as to converge on, and act against, a new single object.

Again : the Economy of Forces is the art of making the weight of *all* one's forces *successively* bear on the resistances which one may meet, and therefore of organising those forces by means of a *system*.

The *necessity* of this principle was felt from the outset of the wars of the Revolution—because national wars deal with large numbers. One must not assume, however, that it arose suddenly, magically, from the compelling nature of circumstance, nor that it was immediately understood and faithfully applied.

When the Convention decreed the mass-levy, they at first produced in the military field nothing but chaos in all its forms, as well as that impotence which I have just mentioned of conducting operations of war.

Creating a new order of things does not involve the ability to give to that order from the outset the power of working, nor even life.

Just as the political revolution, which had recently taken place, might have come to an end after an ephemeral existence—with the Directory, for instance—had not Bonaparte proved, by taming it, that it was possible to base on these new principles the organisation of a lasting society; so, without superior minds such as Hoche, Carnot, Bonaparte, and certain other generals of the Revolution, the conception of the mass-levy, of war with unlimited resources, would have risked remaining a mere fancy, an utopia confuted by the armies and theories of the eighteenth century.

To master that epoch of the Revolution, it would not have sufficed to apply ancient processes to the new situations and resources created by it, as did commonplace men.

Mind has a larger share than that in the use of material. "But, thanks to our good luck, the development of material resources supplied by the mass-levy was connected with such a development of passions, feelings and ideas, that a new manner of conceiving the play of military forces, a new art of war, resulted from it." [1] Therein lies the greatness of a time which supplied the man who was to launch the new principles—Carnot—and the men who were to apply those principles: Hoche, Bonaparte, etc.

So long as the early generals of the Revolution were left to themselves, they continued, in spite of the fact that they were waging a national war, to apply the methods of the eighteenth century to seek positions, lines, cordons.

Moreover, as a result of the new processes (for instance, the army housed and fed by the country it occupied) and of the considerable numbers used, the line, the cordon were still extended; weakness increased.

For a long time the remedy was not perceived by average minds.

Let us remember that Moreau himself entered Germany in 1800, four years after 1796, with an army which by destination, by organisation, contained *one centre, two wings, one reserve*—an eminently rigid conception of things; while every one of these organs like every early army of the Republic, had its own distinct, and purely geographical, object. This brings us back

[1] Général Bonnal.

to the metaphor of the specialisation of credit; to fixed and invariable apportionment.

And as one infirmity involves another, what do we see when Moreau enters Germany?

Such a block, composed of elements not interchangeable, drawn up on an invariable model, sometimes advancing, then going back, stopping in order to establish itself on a position, never seeking battle—such are the manœuvres of 1800 around Ulm, the retreat from the Black Forest, etc.

The new mechanics were no more grasped by Moreau and the early generals of the Revolution, than later on by the French generals of the Restoration who reorganised the lineal order, or than by the authors of our Field Service Book of 1883, which, until 1895, a few years ago, continued to affirm that: "Armies are composed of a centre, wings, and reserve; marching armies use the greatest possible number of roads, etc."

The new mechanics, the spirit of which must penetrate our minds, the importance and novelty of which we shall understand when we come to see how difficult they are to grasp and to set in practice, consist in the following things:

Instead of resorting to the eighteenth-century model, to processional orders by means of wings, centre and reserve as in 1800, to our regulations up to 1895 which guarantee nothing but *form*, you must apply the whole on the same spot, and therefore organise the mass according to a certain system of attack, provide that mass, so to speak, with interchangeable limbs, each functioning by itself, but all aiming at the same *positive result*, which is, to overthrow the same objective by separate means.

It was Carnot who first initiated this manner of understanding, organising, and conducting war. This we have from Dumouriez, the victor of the Argonne, who cannot be suspected in the matter since, after betraying his country, he never failed to sneer at his contemporaries—more especially at those in office. Yet he wrote in his *Recollections*:

"Carnot it was who created the new state of things in military affairs; a state of things which Dumouriez had barely the time to adumbrate and which was perfected by Bonaparte."

The reason why the application was not at first very clear was because Carnot did not himself act in the field. Nevertheless it was he who wrote these words :

" *All the armies of the Republic will have to act offensively, but not everywhere with the same amount of means* (the apportionment of means depends on the goal to be reached). We must have a most offensive and decisive campaign; we must constantly pursue the enemy until he shall be *completely destroyed* (a new result to aim at !)."

All his correspondence shows that he was the first, in that period of commotion and revolutionary chaos, to try and put things in order once more. He sought to remedy the *scattering and crumbling* which were ruining France's considerable forces (fourteen armies in 1794), by means of convergence of effort and singleness of goal.

The numerous divisions set up tended to scatter, to isolate themselves, in order to live, march, and enjoy their independence; he showed them the importance of aiming all at one *same point.*

To the block of the ancient armies, which could no longer reappear, for it was utterly incapable of manœuvring on the new scale, he tried to substitute concordance and synchrony in many efforts starting from various points.

To reunite, to induce to co-operate troops apparently scattered, such was the first result he aimed at and reached.

And likewise, in one particular battle, at Wattignies, Carnot being present, the *idea of an attack by superior forces on a point of the line* first made its appearance.

All this is economy of forces.

Carnot did more than that, and indicated how the result must be sought. Thus he wrote :

" We prescribe to the generals commanding-in-chief the armies operating in Germany to see that the numerous and brilliant combats they have sustained shall be followed by more serious actions the results of which should be final. It is but by winning *great battles* that they will succeed in completely dissolving the Austrian army, and however skilful that army may be in retiring from one position to another, we hope that by coming into contact with it, they will enforce a *general engagement*

the consequence of which will be to compel the enemy to fall far back. . . ."

We have travelled a long way from Marshal de Saxe; from that good general who thought he could wage war his whole life without giving battle. We are very near Napoleon, who said: "There is nothing I desire so much as a great battle"; who, according to Clausewitz, always looked out for a chance of fighting.

Carnot wrote again to Jourdan on Messidor 5th, An IV (1796):

". . . What you have to do, is to draw the enemy into a *great and decisive battle* in his *own country*, on the right bank of the Rhine; and the most suitable spot is precisely for you the place in which just now he finds himself; that is, between Düsseldorf and the Sieg or the Lahn, where he cannot escape being *exterminated* if he is attacked well *in time* and pressed from behind by General Moreau." (This is the true war of manœuvre, of movements aiming at battle.)

". . . Beware, my dear General, from assuming a defensive attitude, the courage of your troops would be weakened and the boldness of the enemy would become extreme. . . ." (Things nobody would have taken into account before that time in a plan of operations, albeit they were in existence.)

"You must, I repeat it, give battle on a great scale; you must give it on the right bank of the Rhine, as near Düsseldorf as possible, at the moment the enemy turns round in order to face Moreau; finally, you must fight with *all your forces*, with all your well-known vigour, and unceasingly follow up the enemy until he shall be entirely scattered. . . ." (That last part of the programme was to be carried out by Napoleon after Jena, by Blücher after Waterloo.)

"The enemy will not *fail to* send a *body of troops round your left* in order both to outflank you and to bring you to a standstill. *You must keep a division for the special purpose of facing such a detached body, a division which, either by its force, or by its unassailable positions, shall shatter the attack or at least contain it. . . .*"

In what we have just read, there is the idea of provoking a battle, and also the idea of *how* to provoke that battle, to engage it with all possible forces by employing the mass.

Carnot bids Jourdan subordinate all means to the attainment of the main end; and, in order not to be deterred by the enemy, " who will not fail to," etc. . . . to cover, to guard himself: but to guard and to cover himself by a detachment *as weak as possible*, by a minimum of forces. He bids him devote a maximum of forces to the main attack, and only a minimum to such secondary operations as are intended to protect it.

Such is the principle of the economy of forces, once it passes into the domain of execution.

But how will that minimum detachment succeed in holding back the body detached by the enemy? By force, if it is strong enough, in which case it will scatter the adversary; or by means of an unassailable position; if it is not strong enough, in which case it will confine itself to holding the enemy in check, which again answers the part ascribed to it.

Thus we see a new feature of organised force make its appearance; for such a force is capable of two actions varying in nature: (1) *breaking up* the adversary by means of a shock, overthrowing him, that is clear; but also (2) *holding him in check, maintaining oneself*, however weak one may be, in his presence by means of the defensive. This can be done by the use of position, according to Carnot; but it can also be done by the use of manœuvre, as we shall see, with Napoleon. The new feature is the economy of *resisting power* in a given body.

Now the utilisation of that new property of organised force, *resisting power, means of lasting out*, jointly with the properties already familiar (*power of striking*, of *breaking up*), will allow for the realisation and practical application of the principle of economy of forces.

" From that mechanical principle were to arise, thanks to Bonaparte's genius, a series of combinations both numerous and various which had the result of opening to our armies the doors of the capitals of Europe." [1]

Once found, the practical application of the principle of economy of forces will enable us to satisfy completely the theory of implacable war, with masses however considerable, whatever time be required, whatever space be occupied; it will enable any troop,

[1] Général Bonnal.

whatever their numbers may be, to reach the maximum of efficiency; finally, it will enable us to fight with the main body of our forces, to put *everything* in, to strike the adversary a blow from which he shall not recover.

Hence Bonaparte's words to the Austrian generals at Leoben. "*There are many fine generals in Europe, but they see too many things at the same time; I only see one, namely the masses. I try to destroy them, feeling sure that the accessories will then tumble down of themselves.*"

There are many fine generals, but they try to keep an eye on *too many* things; they try to see, to keep, to defend *everything:* depots, lines of communication, the rear, such and such a strong position, etc. Using such methods, they end by adopting, when on the defensive, the *cordon* system; when on the offensive, they end by attacking in several directions, or rather in conducting several attacks at the same time; in the one case as in the other, they end in dispersion, which prevents them from commanding, from combining *one single* affair, from striking hard; they end in impotence.

"*I* see only one thing, the *masses;* I try to destroy them, feeling sure that the *accessories* will then tumble down of themselves." *That* is the counter-thesis to the old theory; the destruction of the enemy's *masses* and, therefore, the necessity of organising the use of our own *masses.*

There is one absolute principle, which must direct all our combinations and dispositions, and this is that, in order to dispose of the adversary's masses, we have to ensure the working of our own. Such must be the directing thought of any chief.

From that condition, namely to ensure the working of *our own* masses—which is the main item of any contemplated manœuvre—will arise all those subordinate parts assigned to detachments (advance guards, flank guards, rear guards) to which we apply the general name of advance guard: accessory troops which will have upon each proper occasion to perform a clearly determined mission and to adopt special tactics.

Once that mission has been determined, how is the commander of the advance guard to perform it?

By using the main body of his forces.

Because, once the main goal has been reached, accessory functions can always be fulfilled.

In every case, then, whether the question is to direct the mass or to conduct a detachment, the commander of the mass as well as the commander of the detachment, must:

(1) Determine the main goal to be aimed at (it results from his mission); (2) devote to it the *main body* of his forces; (3) organise the accessories, supply the detachments necessary to the main body's success; (4) establish communications between the *main body* and the *accessories*; that is, set up his forces in a *system* such that these forces may finally act in conjunction.

What is a system?

It is a combination of the two qualities present in all troops: { resisting power. / striking power.

It is a repartition of forces into: { Advance guards utilising the resisting power; / Main body or battle troop utilising the striking power;

such repartition being so organised in time and space that all the forces may finally act simultaneously against a common objective.

Outposts

The most simple system is that of outposts. Suppose a troop is billeted in *a*, *b*, *c*, and has to be covered on the line D E from an enemy whose presence has been signalled to the north; suppose, further, that one regiment (of say four battalions) has been entrusted with the task of organising the outposts.

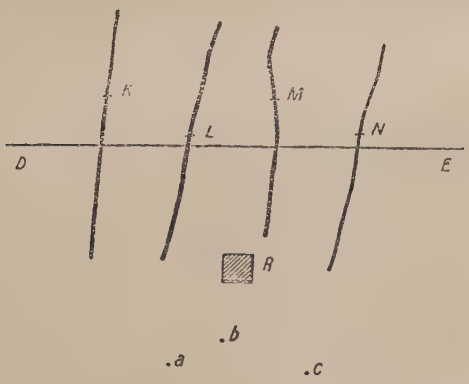
The first idea might be to extend the troop in a uniform fashion along D E. If D E is 4000 yards long, this repartition will give one man per yard; this would provide some power of resistance, but a weak one.

The advancing enemy would hurl his advance guard against the whole front, and nail the defenders to the spot along the line D E; meanwhile, bringing his main body on to a given point—for instance, L—of the line, he would easily overcome any resistance he might meet with.

Against 100 or 200 men, he might use more than 3000.

The principle of economy of forces, applied here, will make an appeal to the *resisting power* as well as to the *striking power* of the troops: two factors instead of one.

That principle suggests to us that, instead of uniformly occupying D E, it is enough to consider, on D E, the road-directions K, L, M, N, along which the enemy may advance, and to hold them with detachments respectively located in K, L, M, N, each of which points is chosen from its power to enable the occupying troop



to make a vigorous stand; in other words, it is enough to establish a number of detachments in "points d'appui."

Once those points have been occupied, the whole line is held, as the enemy cannot, owing to the range of modern arms, pass between those points. He therefore must attack them.

In the rear of those detachments, the mission of which is to resist on those supporting points, we must establish a reserve capable of moving up to any point attacked before its resistance is overcome, and also capable of *acting* on that point.

As every main guard must be warned in time of the enemy's arrival, it will establish in front of it a number of observers, that is, *sentries*; and since these need

in their turn to be both supported and if necessary to be able to fall back, they must have small outposts behind them. The enemy comes on; the sentries give the alarm. It is sent on to the main guards and the reserve; the main guards prepare to resist, and the reserve to march. If the enemy continues to advance, he has to accentuate his attack in order to break the resistance of the point he wants to carry. The reserve proceeds to that point to support it while it still holds.

Take, for instance, a regiment of 4000 men with, say, four companies (of 250 men each) detached for your main guard. Suppose such a force to be holding the line D E. Then when the attack upon some particular point falls, you have this distribution of force: 3000 men (your reserve) + 250 men (the main guard at the point of attack) = 3250.

If, instead of thus practising an economy of force, you had attempted mere uniform distribution, you might have had at the point of attack, say, 100 men at the most.

But in order that manœuvring be possible, the forces must be arranged according to a *system* and distributed thus:

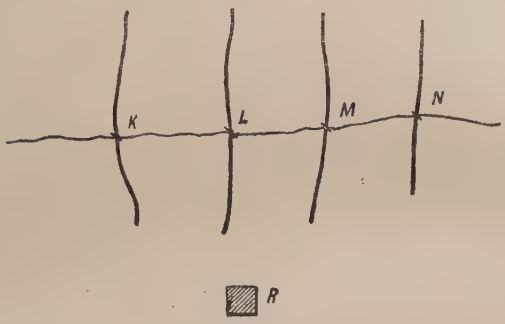
(1) Main guards capable of holding out, therefore established on certain strong points; that is, points offering a good field of fire.

(2) A *mobile* reserve, able to manœuvre within a given time and space; located therefore within reach of the necessary roads; assembled; sheltered from enemy blows.

(3) Sentries whose stations are chosen with a view to their powers of observation.

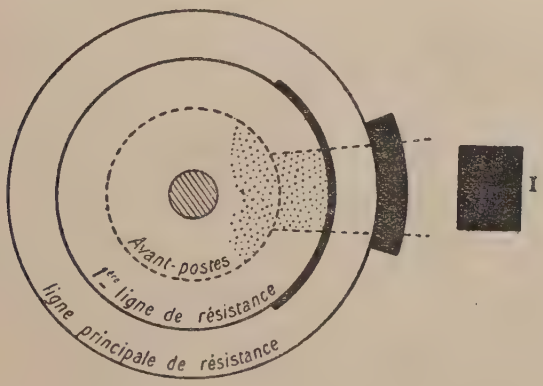
The same considerations apply to the defence of a water line: in that case, also, you have to occupy on the roads of approach a number of strong points (generally located on the river, because villages are usually to be found at the passages which the enemy is compelled to use). Those points should be able to hold out long enough to allow the reserve R to proceed to the point attacked—for instance, to M—and to apply all its forces in that direction; the reserve must be able to send its whole force into action: the whole regiment if it is a regimental action; the whole brigade if a brigade is in question.

The same principle applies to the investment of towns, which with a due economy of forces may be done by besieging forces no more than equal to the besieged (Metz and Paris in 1870 are examples).



In what does such an investment consist?

In a line of permanently occupied outposts, enabling



the investing force to occupy, in case of attack, a previously organised *first line of resistance*. The attack occurring, alarm is given by the outposts; the first line of resistance is then occupied; the reserves prepare. After the attack has dealt (perhaps easily) with the line of outposts, it must, in order to advance, break this first line of resistance. In this attempt it is com-

pelled to concentrate its efforts and therefore to disclose the direction it is taking. Such reserves and investing troops as are not being attacked and are nearest to that direction, proceed to, and establish themselves on, a previously organised *main line of resistance*, while the resistance of the first line is maintained. They there offer a further resistance which gives the whole investing army the time to concentrate at *I*, in the direction adopted by the attacking force, and thus to fight there with *all available forces combined.*

The same principle applies to attack. There, too, the maximum of efficiency is secured by applying the principle of economy of forces and by arranging one's forces according to an organised system.

An attack could not be efficient if it were made in several directions at the same time. One's forces would be separated into several parts. If the enemy presents himself from two different directions, the offensive is organised in one direction only, the most advantageous one; in the other direction, one does no more than hold the enemy in check. The reserves—that is, the *main body*—are therefore placed (1) so as to support and accomplish the attack which has been devised by the commander and which is the main object of his plan; (2) so as to be able if necessary to reinforce eventually the parrying blow elsewhere, which otherwise might prove inadequate. In proportion, as decision comes nearer, all these reserves stream towards the point of attack, where the day will be decided, and thus bring into play all available forces.

The principle applies to every military act which is characterised by movement. In every case, the forces detached in view of the necessities we have successively acknowledged are but the eyes, fingers, arms of a body (the main body) for which they are working. The constitution they must be given results therefrom; hence also their close connection with that body.

The detachments retain a relative independence; they use their own tactics, just as my arm is capable of covering my body, of striking forward or to the right, while I go onward. But they must remain closely connected with the main body, in the movement of which they participate, from which they draw their life, for the benefit of which alone they do their work;

that connection must be close enough as to allow the body always to concentrate its whole weight as well as all disengaged forces in the direction where the adversary has been perceived or seized : a final result which can only be attained, as we have just seen, by means of a systematic organisation involving : *eyes* turned towards such directions as are of interest to the issue; *arms* extended in such directions as menace peril; freedom of *movement* for the main body to strike at last as a whole in the direction *selected* for the result.

Any troop, therefore, which manœuvres in compliance with the principle of economy of forces does not divide itself on the field, as did the armies of the eighteenth century, into three arms, nor even generally into groups of the same kind, regiments, battalions, batteries, squadrons; such a distribution seldom answers to tactical requirements. The force will rather be represented by : one *body* provided with such *organs* as are needed for its tactical action; that is, one *main force* provided with such advance guards as are made necessary by circumstances; and this disposition will be maintained even during the action itself, as we shall see later on. Those advance guards receive special component elements (infantry, cavalry, artillery) adequate to the part which has been assigned to them. Their *resisting power* in presence of superior enemy forces will result either from : (1) a *defensive action* utilising a strong position and holding back an enemy unable to overcome it; or (2) a *retreating manœuvre* the duration of which (being itself dependent upon available space and time) will allow the main body to act in compliance with the plan conceived. In that case the detachment does not hold the adversary, but only delays his advance.

A short survey of the first days of the campaign of 1796 will show us very clearly how the principle of economy of forces contrasts with the old methods it has supplanted.

Montenotte, Dego, Millesimo

(See Map No. 1)

In the first days of March 1796 our forces were divided into an army of the Alps and an army of Italy.

The situation of both armies was equally pitiful. Money, food, clothing were lacking everywhere. The soldiers did not desert; they looted in order to live and refused to listen to their officers, who, being equally miserable, were resorting to the most irregular proceedings. Mutiny soon broke out. The army would have dissolved had the deficiency in mere necessaries continued.

The Directory (the government of the day), who felt powerless in the presence of this evil—which they fully appreciated—saw no other remedy than to transfer the army into the rich provinces of Italy. Even for that, however, it was necessary to set the army in movement. They undertook to get from the Republic of Genoa, by fair means or foul, the assistance they urgently needed.

Scherer, overwhelmed by such a task and by so bold an undertaking, asked to be relieved from his command by some younger and more audacious chief.

Salicetti then appeared as Commissioner of the Government with the army of Italy. His efforts were at first fruitless. He tried in vain to make Scherer go back on his decision; he asked the Senate of Genoa in vain to lend a few millions to France. He resorted to intimidation. His idea was that a body of French troops should occupy Voltri and, passing by the Bochetta, get hold of the Genoese town of Gavi. Scherer partly adopted these views, formed an expeditionary force of 9000 men supplied by the three divisions of Augereau, Laharpe, and Meynier, and handed over the command of that force, with special instructions, to Massena. The latter proceeded to Savona and sent out towards Voltri, on March 26th, under Pijon, an advance guard (3000 men) the patrols of which reached San Pier d'Arena, a suburb of Genoa. As for the Gavi expedition, it was postponed until the arrival of Bonaparte, who had just been appointed Commander-in-Chief of the army of Italy.

On March 26th, Bonaparte arrived in Nice and took over his duties. He found there Berthier, whom Scherer had asked for as his Chief of Staff, and who had been granted to the new Commander of the army.

The effects of the impulsion given by Salicetti were already being felt. The army had boots, some money, promises of flour, of fodder, of mules. It was the part of wisdom to take advantage at once of this change for the better and assume the offensive without delay.

As early as the 28th preparatory measures were hurriedly taken. General Headquarters were transferred from Nice to Albenga; the troops were largely reconstituted, more particularly by reinforcing the active divisions (of battle and advance guard) with drafts drawn from the divisions on the coast (Oneglia, Nice, Toulon, Marseilles). The reorganisation of the infantry known under the name of "the *amalgam*" was hastened; the cavalry regiments were concentrated on the Riviera of Genoa; stores, parks, ambulances were formed; animals necessary for transport were commandeered. The rapid execution of these measures allowed an entry into operations about April 15th, with 35,000 bayonets, 4000 horses, and some twenty guns of small calibre, distributed as follows:

Massena	18,000 men at	Savona	
Augereau	7,000 „	Loano	
Serurier and Rusca	12,000 „	Garessio Bardinetto	
Cavalry	4,800 „	Loano	
Besides:			
Marcquart and Garnier	7,000 men at	Tenda	
Divisions on the coast	9,000 „	Oneglia Nice Toulon	

Plan of Operations

Bonaparte will assume the offensive:

(1) Because the army cannot live any longer in the Alps, nor even on the Riviera.

(2) Because these are the best tactics to be used against Piedmont by reason of its border.[1]

[1] ". . . When two armies stand on the defensive, that one which can more quickly reunite different posts in order to carry the posts opposed to it necessarily needs a smaller number of troops and, forces being equal, always secures advantages.

"The frontier of Piedmont is a semicircle, the two armies of the Alps and of Italy occupy the circumference, the King of Sardinia occupies the diameter. The circumference we occupy is full of passes and of difficult mountains. The diameter occupied by the King of Sardinia is an easily accessible, fertile plain, where he can, within a few days, transfer troops from one end of the diameter to the other. The defensive system is therefore always favourable to the King of Sardinia.

"In order to secure equality of forces, we must have double the number of our enemies.

"These remarks are of the greatest moment: it would be easy to

(3) Because—most of all—these tactics suit the young Commander-in-Chief's temperament.

In any case, the army of Italy advanced along the Riviera in order to live; it occupied the points on the coast; it maintained relations with the Republic of Genoa. The offensive had to start, therefore, from that region. What direction should it take?

Carnot, in his memorandum of June 30th, 1794, concludes, after showing the difficulties of entering Piedmont by way of the high ridge of the Alps:

"... Therefore if the idea is to attack Piedmont, it must be done from the department of the Alpes-Maritimes, by first seizing Oneglia.

"These motives ought to induce the Committee of Public Safety to order an attack on Oneglia, wherefrom it will be easy for us to enter Piedmont later on, by turning the post of Saorgia and besieging Coni."

Bonaparte knew better. He had fought in that same region the campaign of 1794 (battle of Dego). He had seen the country of Altare, Carcare, Cairo, a deep depression from five to nine miles wide leading into the Italian valleys.

"The road from Vado to Ceva, the first fortified town on the frontier of Sardinia, is eight leagues long, never rising more than from 1200 to 1800 feet above sea level. These heights are not, properly speaking, mountains at all, but only hills covered with orchards and vineyards.

"The passes are never blocked by snow; there is snow on the summits in winter but never in great quantity.

"Savona, a harbour and a stronghold, is well placed for use as a depot and supporting point. The distance from that town to Madona is three miles; a paved road leads thither, and the six miles from Madona to Carcare could be within a few days made practicable to artillery. At Carcare there are carriage roads which lead into

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demonstrate it by describing the frontiers in detail and by analysing the different wars of which they have been the scene.

"It would then be clearly demonstrated that each time we have kept on the *defensive* on the frontier of Piedmont, we have always wanted a large number of troops and we have always been worsted in small affairs.

"The offensive system must be adopted for the frontier of Piedmont."—Note of July 19th, 1794, attributed to Bonaparte.

Piedmont and Monteferrato; that point was the only one through which one could enter Italy without butting against mountains" (Napoleon).

To sum up: Bonaparte had found a low passage (height from 1200 to 1500 feet), with gentle slopes and practicable ground; roads could easily be made there; from Savona to Carcare was one day's march. From the latter point one could easily fall on the adversary, force the gates of Piedmont, and, in a word, develop an offensive under favourable tactical conditions.

There was yet another advantage in marching on Carcare.

Two roads meet at Carcare:

(1) That by way of Acqui leading to Alexandria in Lombardy.

(2) That by way of Ceva leading to Cherasco in Piedmont.

North of Carcare rises a range from 1800 to 2400 feet high, which for forty miles, as far as the road from Cherasco to Alexandria, cuts all communications between both provinces. Therefore by occupying Carcare, the armies of Piedmont and Lombardy, in case they intended manœuvring and fighting together, would be prevented from effecting a junction save by the road from Cherasco to Alexandria.

Such an intention of effecting a junction was, however, not likely to exist at that moment. The policy of the Allies was influenced by private, often contradictory, views, and by divergent, and sometimes even contrary, interests.

Piedmont, the first to be drawn into the war against France, had already tired of it. The people were suffering; the government, a weak one, only went on because it feared reprisals from Austria.

As for the latter power, master of Dego and Millesimo since 1795, its government desired to extend its empire as far as Savona, on the Riviera of Genoa, in order to give Milan an outlet to the sea, in order to bar Piedmont's aspirations towards the Italian peninsula, also in order to pave the way for the annexation of Genoa.

The community of views was no closer between the armies of our opponents than between their governments. The conceit and incapacity of the Austrian generals in

command of the allied armies had brought about a deep dissent between them.[1]

Therefore when the winter of 1795–6 came on, the Sardinians stayed in Piedmont, Colli's army between Ceva, Mondovi, and Cherasco. The Austrian army, beaten at Loano, had withdrawn into Lombardy, where it had taken up its winter quarters, leaving the Piedmontese alone in touch with the French.

In the spring of 1796, Beaulieu had been appointed Commander-in-Chief of the Austrian army, Colli had kept the command of the Sardinian army.

Piedmont had claimed the direction of operations and tried to push the Austrians into Savoy. The claim had met with a refusal. The Emperor had even refused to engage his troops further than the Tanaro, but the Sardinian army was no longer under an Austrian general. In consequence, the Piedmontese, conforming themselves to the theories of the time, were content with holding their frontiers and covering their capital; they rested their line of operations on Turin.

"They expected but small results from their small efforts," writes Clausewitz.

"It was a mistake to assume that, in order to cover Turin, one had to stand astride of the road leading to that town; the armies united at Dego would have covered Turin, because they would have stood on the flank of the road leading to that town" (Napoleon).[2]

[1] For instance, a Sardinian staff officer wrote:

"The Piedmontese had a growing belief that von Wins (who had succeeded Beaulieu in the command of the Austrian army) had never intended anything more than covering the access to Lombardy, keeping the French at a distance from himself and throwing them back on Piedmont, in compliance with the miserable policy of the Germans in the old wars.

"Others went so far as to believe that von Wins had not regretted to see a general he disliked embark upon an enterprise which apparently was a doubtful one, as von Wins had never consented to give a definite order about it. The commander of the Piedmontese army had, from the start of the campaign, been unceasingly submitted to a thousand petty vexations on the part of the commander-in-chief. The kind of indignity to which he was reduced, after the war council in Massuco, made his feelings still more bitter. General von Wins enjoined him on that occasion not to move any troops until further orders, and thus kept his hands tied until the middle of October."

[2] In 1870, the contingents of Southern Germany, united in the Palatinate with the Northern forces, covered Southern Germany more efficiently than if they had established themselves on the very borders of their respective States.

A divergence of military actions caused by a divergence of political views, moreover a thorough misappreciation of the conditions of a great war: such was the picture which offered itself to Bonaparte.

By marching on Carcare, he would not only strike at the centre of a system of forces, but he would determine a complete separation of interests and action and utilise it in order to beat each of the adversaries separately. To the tactical result he had been driving at from the start: "to attack the enemy in the best direction," would be added a strategical result: "to attack one isolated fragment of the opposing forces, the Piedmontese army, once it was definitely deprived of any external help."

"By entering Italy via Savona, Cadibona, Carcare, Bormida, one might hope to separate the Sardinian from the Austrian army, because, from that direction one threatened Lombardy and Piedmont equally. The interest of the Piedmontese was to cover Turin, that of the Austrians to cover Milan" (Napoleon).

The separation having been enforced, what should be the first objective? The Austrian or the Piedmontese army? There were two opposing theses: the thesis of Carnot and the thesis of Bonaparte.

Carnot was so entirely dominated by his own mechanical theory of forces that he carried it to preposterous lengths and overlooked a peculiar geographical and political situation which did not escape the eye of Bonaparte. So true is it that in war there is no such thing as an absolute system, and that even the most certain of principles must be applied according to circumstances.

The thesis of Carnot ran thus: "After capturing Ceva and bringing the left of the army of Italy nearer to Coni . . . the Commander-in-Chief must direct his forces on the Milanese country and mainly against the Austrians . . . he must not lose sight of the fact that the chief blow must be dealt against the Austrians. . . ."

By marching on the main army and beating it, so (thought Carnot) would the war be brought to an end; because the *centre of gravity* of the resistance to be broken was *there*.

This thesis would have been sound had both armies formed one system, that is a collection of forces so

arranged as to co-operate. As a fact they represented two distinct groups, with divergent interests; two separate masses, each of which had its own centre of gravity and its own sphere of attraction.

Both adversaries had, therefore, to be beaten separately, both questions had to be treated separately; the war could not be brought to an end by striking one of the enemy armies, even though it were the stronger one of the two.

On the contrary, once the stronger one had been taken as a first objective, the weaker one, which was manœuvring independently, could not be overlooked. One had to find out in what measure it could oppose itself to the action undertaken. In that respect the geographical situation of Piedmont and the state of the Sardinian army presented peculiar features of their own.

As was pointed out by Bonaparte, the French could not go on acting against the Austrians with such a precarious line of communications as that of the Riviera (a line which was to be extended as far as Lombardy and Venetia) unless they could efficiently guard themselves against the Sardinians; unless, therefore, they used for protecting that line a number of forces the absence of which, in their own state of numerical weakness, would be doubly felt on the main field of operations and would make any decisive result impossible.

It was necessary, therefore, to begin by settling the Sardinian problem. The Austrians could not be attacked before the Sardinian army should have been beaten and suppressed; the road of invasion into Lombardy and Venetia went by Piedmont. Here you had that "particular case" which is inherent to every military situation and gives each its character.

Such was, in its general features, the profoundly meditated and thoroughly thought-out plan of Bonaparte; he was capable of all the effort required to carry it out: he was twenty-seven years of age, had nothing to lose, everything to gain, and he had the will to act; he was equal to every sort of independent action, for he already considered himself at least as strong as the members of the Government of France whom he had saved on the 13th Vendémiaire. He would dare anything.

Opposite him, Beaulieu had just taken over the com-

mand of the Austrian army (he no longer commanded the Sardinians); he was seventy-two years old and had a situation and a reputation to save. "He was the product of sixty years of official pedantry, the thing most likely to depress the mind and the heart. He was the old servant of an old monarchy, the instrument of a heavy and starched aulic council" (Clausewitz). What would such a man look for? Before all he would try to avoid risking either his own reputation or the army and the interests of the monarchy, even if at such a game neither of them should gain anything.

His schemes, as well as his temperament, were inferior to those of Bonaparte. He still contemplated taking the offensive, but only in order to drive the French from the Riviera, to take the department of Alpes-Maritimes; join hands with the English; thenceforward continue a war of posts in the mountains, and threaten, if need be, the French in Provence.

How greatly did such a conception of warfare differ from the new idea launched by Carnot, "follow up the enemy until complete destruction ensues"! Beaulieu's type of war was conducted for partial gains only. Preparation, execution, would likewise involve but a reduced and partial use of the means at hand.

Thus, Beaulieu hears in Alexandria, in the last days of March, that the Genoese Government has been threatened by the French Commissioners; he hears of an expedition against Gavi, of the occupation of Voltri: he decides to attack. Without assembling his forces, we shall see him attack with but half of the troops at his disposal. Will he at least bring into the attack he is preparing that available half of his troops? We shall see that later on.

Beaulieu thought, moreover, that the French army was not for the moment capable of fighting efficiently. He therefore proposed, without exposing himself, to accomplish the following task: (1) To strike at the French right, which had ventured as far as Genoa; (2) to cover Genoa, the weakness of which gave ground for anxiety; (3) to join hands with the English Admiral; and all this while to avoid engaging himself against the main body of French forces.

There, again, the old general was belated in his

conceptions; for, in the new warfare, once fire was set to a single point, the whole caught fire. The advance guard being attacked, the whole army was bound to come up.

In any case, conforming himself to his plan, he sent ten battalions, on March 31st, in the direction of Novi, Pozzolo, Formigero, and from there to the Bochetta (April 2nd).

He also sent eleven battalions under d'Argenteau towards Sasello; the latter scattered them out in very extensive cantonments and pushed up advance guards to Giovi and Upper Montenotte.

From the 2nd to the 9th he did not move; he completed his preparations for carrying out his plan, concerted with the English in order to prepare an embuscade for the Laharpe division and to capture that division by means of a triple attack.

Finally on the 5th or 6th, he fixed his own dispositions, and gave out his orders.

In the *centre* was a body under d'Argenteau, composed of four Piedmontese battalions and twelve Austrian battalions, the last elements of which were to assemble at Acqui, and march via Montenotte on Savona, in order to cut, at that point, the Cornice road.

To the left, a body of ten battalions, after assembling at Novi, were to proceed to Voltri, which it was to attack. The English squadron was to do its best to co-operate in this action by gunfire or by landing. The Sardinian army was no longer under an Austrian general, but the relations with General Colli, who commanded the Austrians, were good. Relations were less strained, but more rare, than in the past. Both generals ought to have come to an understanding before going into action, but since the end of March (at which date Colli had sent out offensive reconnaissances against Serurier) the contact between the two commanders-in-chief had been lost. An appointment had been made for meeting on April 14th; but by that date events would have gone far. The Sardinian army ignored what was happening; it still occupied Ceva and covered the Tanaro. It had only received from Beaulieu a request to send four battalions to Dego under the orders of d'Argenteau.

What, in the meantime, did Bonaparte do now that his offensive had thus been forestalled?

He met the first actions of the enemy (aroused by the unlucky attempt on Genoa and marching on Voltri) by executing a number of defensive countermoves which would still allow him later to carry out his own plan.

The Sardinians were making a number of offensive reconnaissances on Serurier. He reinforced that division by sending out the Rusca brigade as far as Bardinetto.

Scherer's system of outposts was meanwhile carefully revised and improved.

Massena had in Savona the 3000 men of the Laharpe division and the Menard brigade; but in front of him, apart from the line from Cervoni to Voltri, there was another line of outposts strongly established on fortified positions; these were the main guards of Stella, Montenegino, Altare, Monte Baraccone, San Giacomo, Madona della Neve, Medogno; the latter four points were held by the Joubert and Dommartin brigades which joined the Rusca brigade on the Tanaro.

In the rear, a number of substantial reserves of outposts were established near Stella, at the Madonna of Savona, at Cadibone, at Quiliano.

Strong reconnaissances came into touch with the enemy as soon as the latter began to manœuvre.

Finally Bonaparte himself gave his instructions; he particularly ordered Serurier and Rusca to keep to the strictest defensive, in order not to draw the enemy's attention in the direction of Bardinetto, by which he intended to reach Millesimo.

The same instructions ascribed to Cervoni (who had replaced Pijon at the head of the detachment in Voltri) a special mission. The Austrians seemed to intend acting in the direction of Genoa (as appeared from the concentration of their forces and headquarters at Novi). The body under Cervoni would attract them, then hold them; to this end that commander was reinforced with half a brigade; he was to send out reconnaissances on San Pier d'Arena, but to avoid being crushed by Beaulieu and to withdraw in time on Varazze, where he would be covered by the detachment of Stella.

We have here an army on a *strategical defensive; on the look out,* so to speak; capable none the less of suddenly assuming the offensive. It was *covered* in all directions at a distance and by forces which allowed it,

in case of its being attacked; to concentrate under shelter, in order to meet the attack, and that on the very point of attack; or again, to steal away safely if its commanders so determined.

Were that army to assume the offensive in any possible direction, its facilities for concentration would be the same as they had been while it was still on the defensive, and, further, all the important issues by which it might debouch were held.

Owing to that organisation consisting in *a body* (the main body) and *limbs* (advance guards), owing also to the resulting *zone of manœuvre*, the army was constantly in position to strike with *all its mass* on *one point*.

We shall see, on the contrary, Beaulieu's three corps operating independently of each other in three directions which do not communicate with each other, also with three distinct geographical objectives, and, lastly, under an absolutely rigid arrangement.

That contrast was very well explained by Bonaparte when he wrote:

"Beaulieu was dividing his forces, for any communication between his centre and his left was impracticable otherwise than by going behind the mountains, while the French army had been placed, on the contrary, so as to be able to assemble within a few hours and to fall in one mass upon one or the other of the enemy bodies; if one of these were beaten, the other would be absolutely compelled to withdraw."

After having thus warded off any possible attack by the enemy, Bonaparte, displeased at first with the movement on Voltri which might have hurried on events before he was ready for them, intended utilising that movement as soon as the advance of his own preparations should allow; even though he should have to alter his original plan—retaining its essentials; for, by means of reconnaissances, he kept himself informed of the situation at Cairo, which still remained unoccupied between Colli and d'Argenteau.

The Austrians resumed their movement on April 9th, still leaving Colli without information. Reconnaissances were directed against our outposts, more particularly on Cervoni. Bonaparte hurried up from Albenga to Savona, coming nearer the point where the enemy was striking.

The Actions at Voltri

Cervoni maintained himself on the 9th with his right at Pegli, his centre on Mount Pascino and at Pra di Melle, his left at the Bric Germano. He kept supporting troops in Arenzanno and Varazze.

On the 10th, the Austrians debouched in two fairly equal columns:

(1) *Via Pontedecimo:* Here Pittony, with artillery and cavalry (4200 men), was covered on his right by a flanking body. He traversed San Carlo and Sant' Alberto. He was held up at Pegli by Lannes with the grenadiers of the 70th and 79th half-brigades; he opened artillery fire on them and the situation remained stationary until nightfall.

(2) *Via Masone:* Sebottendorf (about 3200 men) vigorously attacked between the Inferno and Acqua Santa, carried the post of Pra di Melle, and surrounded near Melle four companies of the 70th half-brigade, which succeeded, however (though not without losses), in reaching the mountain called " The Capuchins," near Voltri.

Cervoni reached the summit of Germasso; from there he watched the movements which, through the hills del Dente and Reisa, might threaten his line of retreat; as the enemy did not attempt anything in that direction, he abandoned his troops to their uncertain fate, allowed them to withdraw as chance and local opportunities permitted, and confined himself to rallying them in the evening at seven o'clock around Voltri. Then, after having lit a number of large fires, he set out to retreat (at 10 p.m.), as he had been ordered to do, on Arenzano which he had already occupied; his movement was covered by three companies of grenadiers; these latter held for a certain time in the Convent of the Capuchins in Voltri and left that place at midnight in order to withdraw on Arenzano, where they were received by a rear guard (one battalion of the 99th). The retreat continued in the same fashion on Varazze, where Cervoni arrived without being followed and having lost only 100 or 200 men. From Varazze he joined hands with the main guard at Stella.

His tactics are an excellent example of the tactics which should be employed by retreating outposts. The

line of retreat should be safeguarded; the main points of it occupied in time; such movements of the enemy as might endanger it, watched; fighting troops which one intends to withdraw should not be reinforced. Such troops should successively retire under protection of supporting troops. Finally, the main body must fall back without the enemy perceiving the movement (so far as this is possible), and covered by a rear guard which later on falls back upon and is received by the main force.

Beaulieu entered Voltri at midnight. He had 7000 or 8000 men with him. He talked of an offensive, but in point of fact he ceased to act. During the morning of the 11th, after an interview with Nelson (who had arrived during the night of the 10th–11th), he kept perfectly still. The strategical result he had aimed at, namely the covering of Genoa and effecting a junction with the English, seemed to have been reached; why should he act?

On the other hand, the tactical result he had thought of attaining—crushing Cervoni with three columns and the aid of the English squadron—had been missed; because the enemy, instead of halting, pinned to his original positions, had fallen back. But the situation could not be left at that. The French could now threaten the corps of d'Argenteau, from whom no news was forthcoming. Beaulieu began to grow anxious. He perceived that he had perhaps done nothing but endanger his own army. He started in a carriage at 2 p.m. from Voltri and went to Novi and Acqui, where he might well have to concentrate a certain force. Urgent help must also be prepared for d'Argenteau: Beaulieu sent Wukassowitch with three battalions to support him without delay.

Thus the theory of partial results, of restricted means, of the conquest of geographical objectives, began to fall to pieces. Over against it, we are about to follow a man applying the theory of *absolute* war.

The Action of Montenegino

What had been happening meanwhile to d'Argenteau? Why had he not been able to make his action felt on the Cornice road?

It was not till the 9th that d'Argenteau received the orders which enjoined him to act on the 10th, to proceed to Montenotte, capture the ridge held by French posts and thus establish his connection with the corps on the left.

Under such circumstances he was in no condition to attack on the 10th. He devoted that day to assembling the force he thought proper to use; and it was not till the 11th, at the moment when Beaulieu was leaving Voltri, that he himself attacked at Montenotte.

On that day, early in the morning, he set three columns moving:

(1) A column on the left (four battalions under Lieutenant-Colonel Lezeni) starting from Sasello over the Giovi pass, in direction of Stella. After meeting with some resistance at San Giustino, it was definitely held up at Stella by the French 14th half-brigade which had been sent from Savona in order to occupy that post, and by a detachment of the Cervoni brigade which had just arrived.

(2) A column in the centre (three battalions), formed at Paretto and Maglio, arrived, under d'Argenteau himself, at Pontinvrea, where it divided into (*a*) one detachment going up the right bank of the Erro (two companies); (*b*) the main body still marching on Garbazzo (11 a.m.) where it met:

(3) The column on the right (three companies and two battalions) which had come from Cairo and Dego along the ridge, under the command of Rukavina.

That same morning, Brigadier-General Rampon, sent out from the Madonna of Savona on a reconnaissance towards Montenotte with the 2nd battalion of the 21st half-brigade and three companies of the 1st Light Infantry, had occupied Ca Meige Dett'amore, Cascinassa and Crocetta. At about 10 a.m. the first of these posts was attacked and carried by Rukavina. Rampon fell back on the Bric Castlas, which he soon abandoned after d'Argenteau had entered Cascinassa. He then fell back further on Ca di Ferro, where he found time to rally his last post of the Crocetta; then, having collected all his troops (900 men), he resisted on the Monte Pra; finally, at about 1 p.m., he was back in his works of Montenegino.

Montenegino is a hill overlooking the ridge which

extends from Mount San Giorgio to Mount Cucco. It was reinforced by a redoubt completed by a *flèche* commanding the northern slopes, near the pass between the Monte Pra and the Montenegino, and by a small southern redoubt, twenty-five yards below the main one, flanking the western slope.

The Montenegino was held by a main guard of about 600 men (two battalions of the 1st Light Infantry, the third one occupying the Doria Palace).

Rampon, having now about 1500 men, including those he had brought in with him, soon lost the *flèche*, but held off the attacking Austrians (about 4000 men) during the whole afternoon. D'Argenteau gave up the attack before he had brought up his artillery; he bivouacked on the Monte Pra, opposite the enemy, and in order to cover himself he called for the following forces: from Lezeni's command, one battalion which occupied the Bric Sportiole, and two companies placed at the Bric Mindo near Altare; while at the Bric Castlas he had two detachments and one battalion sent for from Squanello.

At five o'clock, Rampon sent Bonaparte a note in which he declared himself able to push the enemy back on Montenotte provided he were reinforced with one or two battalions and two 3-inch guns. Bonaparte's own idea was more far-reaching.

He had gone up during the day to the sanctuary of the Madonna (1200 feet below the Montenegino) to find Laharpe. There he had heard the incidents of the fight; he had also received reports from the outposts and from spies: the Piedmontese had not moved; their main forces were still between Ceva and Mondovi; Carcare and Cairo were not occupied; 2000 men were scattered between Dego, Millesimo, Montezemolo.

The Austrians had attacked at Voltri with 7000 or 8000 men, at Stella with 3000 or 4000 men, at Montenegino with about 4000; three columns therefore were marching on Savona.

The space at Bonaparte's disposal did not allow him to postpone the beginning of operations any longer. He must act immediately lest he should be surrounded by Beaulieu. On the other hand, he was in a position to muster, on the 12th, on any battle-field he might choose, in whatever direction he might adopt, nearly

the whole of his forces; while Beaulieu, even with the greatest despatch could not assemble half of his own, in view of the dispersion noted above.

During the day, Bonaparte sent his troops a preliminary order: "*Attention!*"

He leaves for Savona with Laharpe, sends for Massena, explains his intentions to them by word of mouth. Berthier immediately informs the other divisions, without waiting for the arrival of headquarters which, recalled from Albenga in the morning, will not be able to work in Savona before about midnight. (This way of proceeding was later to become the custom of the Emperor.) In compliance with these orders:

Rampon, reinforced by 2300 men and two guns, spends the night at Montenegino; behind him, Laharpe, after leaving a few companies at Savona and one battalion at the Madonna of Savona, whence he proposes to join hands with Massena by occupying the Monte Occulto, arrives at midnight at the Doria Palace with about 7000 men, made up as follows: the 14th half-brigade lately arrived from Stella, where it had only left a detachment; the Cervoni brigade (70th and 99th half-brigade) which Bonaparte had reviewed at Savona in the evening.

These troops have orders to attack d'Argenteau at the very first moment possible, in front and in flank.

Massena comes at midnight to the Plan del Melo with the Menard brigade (taken from the Meynier division which had been dissolved); as soon as Laharpe advances, Massena is to attack at dawn, on Montenotte, in order to cut d'Argenteau and rout all the reinforcements that might come to him.

The troops of the combatant body are to bivouac about midnight south of Altare in this order:

Augereau at Mallare with 6000 men.
Dommartin with 3000 men at Montefreddo } where they are to expect
Joubert with 2000 men at Altare } further orders.

The reserve of the artillery followed.

Augereau " is to leave Mallare at 5 a.m., and proceed to Cairo. He is to cover his march by scouting on his left and to occupy the chapel of Saint Julia between Carcare and Cairo. If he finds the enemy there, he is to attack him and drive him out.

" Once he is beyond Cairo, he is to occupy the mountains on the left and send out reconnaissances to Rochetta, midway from Dego, where he will receive further orders.

" On the way, he will attack the enemy wherever he meets him, and send news of his arrival to Altare, where headquarters will by that time have been established."

Serurier is instructed to make numerous reconnaissances.

Under those conditions, Bonaparte calculates that he will have, early on the 12th, the following forces :

At Montenegino . .	Rampon . . .	9,300 men
At the Doria Palace . .	Laharpe . . .	
At the Plan del Melo .	Massena (Menard brigade)	3,500 ,,
Marching on Carcare .	Augereau . . .	6,000 ,,
At Montefreddo . .	Dommartin . . .	3,000 ,,
At Altare . . .	Joubert . . .	2,000 ,,
		23,800 ,,

Plus the artillery reserve.

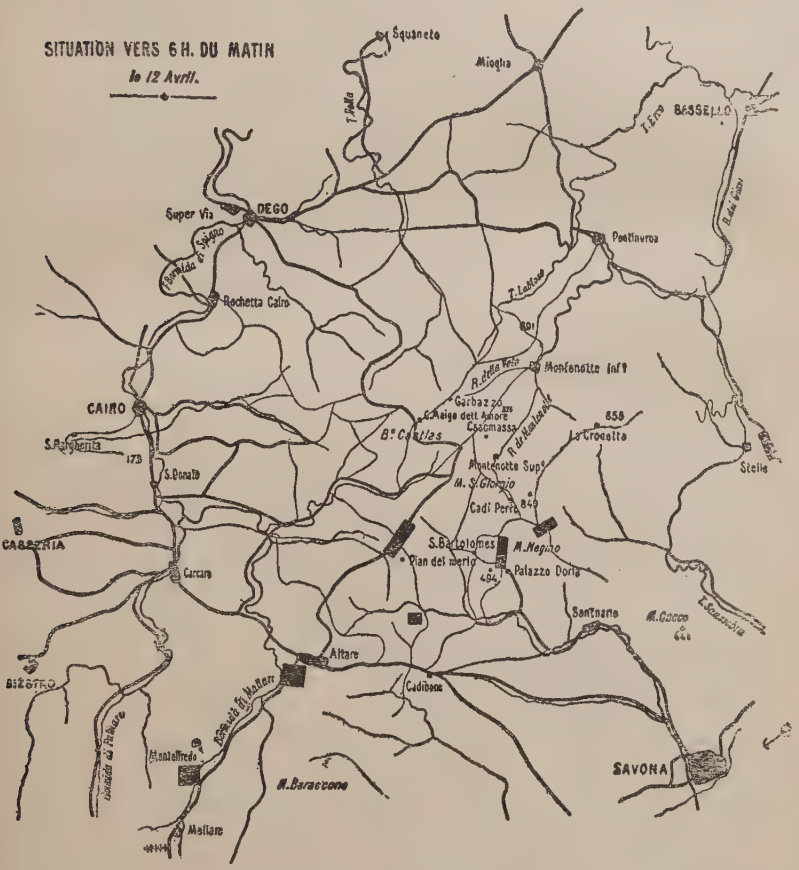
The distance between any two of those places is less than five miles (exactly four and a half from Altare to the Bric Castlas, three from Altare to Carcare). Communications have been ensured for the transmission of orders and informations.

Thus Laharpe and Massena will attack with 12,000 or 13,000 men the 3000 or 4000 men which Argenteau discovered to the French on the 11th. And even if Beaulieu, by displaying prodigious activity, should manage to bring that number up to 12,000 or 15,000 men, Bonaparte would still be able to beat him during the day with 24,000 men.

The whole army now concentrated (all troops not wanted for the protective duty, Joubert, Dommartin, etc., had been recalled) was in position to manœuvre on Montenotte against reduced forces, and this owing to an enemy dispersion maintained by Serurier more particularly in front of Colli, and that without using large forces. The tactical result in that direction had been rendered absolutely secure. The whole is an example of a thoroughly organised attack.

But while Bonaparte was thus seeking and preparing

for his tactical success he also intended to promote as much as possible the execution of his strategical plan: that is, the separation of the Austrians from the Sardinians, by occupying Cairo—which was still unoccupied on the 11th. To this end he sent Augereau



thither, as early as the morning of the 12th. Any combination may be *parried* if time is left to the adversary, if the adversary be not overtaken by speed and surprise.[1] In order to take the point of Cairo by

[1] "Strategy is the art of utilising time and space. I am more economic of the first than of the second. I can always regain space; time lost, never."—Gneisenau.

surprise, Augereau was ordered to be there at an early hour, on the first day of operations.

Should, however, the enemy, being warned, have occupied that point at the last hour, he would have to be driven out before receiving any reinforcements. Therefore Augereau had orders to proceed with a strong advance guard.

Again, should the enemy, contrary to all forecast, have had time to bring up reinforcements to Cairo, the main army would still be able to intervene in the afternoon of the 12th in order to finish the business undertaken by Augereau's advance guard.

That advance guard would not in any case be lost for the combatant body, and should Massena, during the morning, come up against strong resistance—for instance near Montenotte—the advance guard would be in a position to overtake and help him. It is only a matter of five or six miles.

In any case this advance guard would have a good deal of scouting to do, and it would have to maintain its connection with Massena to the east, with Serurier to the west, with Joubert and Dommartin in the rear. Therefore it needed cavalry; it received four squadrons.

Here, then, we have the whole army concentrated on the 12th within a narrow space, ready to act if necessary with its whole weight, in the morning, in the first direction aimed at, namely Montenotte; ready also in the evening to act, if equally necessary, in the second direction, Cairo. In both cases its action is being directed, informed, prepared by advance guards:

Massena on Montenotte.
Augereau on Carcare, Cairo.

Rampon and Laharpe attacked d'Argenteau at daybreak with 9000 men and outflanked him. Massena, who at once grasped their move, carried by storm first the two companies, then the battalion which d'Argenteau had placed at Bric Castlas and which, having arrived during the night, were insufficiently entrenched. He fell on the Austrian rear and reached Upper Montenotte before them.

Attacked from all sides, d'Argenteau saw his bewildered battalions whirl in confusion. He managed to collect 700 men only as reinforcement in the course

of the day. His reserves, left at Sassello, Squaretto, had not the time to intervene. They heard of the rout from the fugitives.

As for Bonaparte, he stood at daybreak on the ridge by which Massena advanced north of Altare. From there he saw a number of points of the battle-field; he received quick information; in case the action should not develop according to his wishes, he would be in a position to intervene with such troops as were available; to call back, if need be, Augereau and the other columns. It soon became clear that everything was going well on that side. He was therefore able to resume without disturbance the march of his army upon Cairo.

Unfortunately he had to reckon with delay, caused in this case by the necessity of supplying such things as muskets and boots.[1] Joubert only arrived at Altare on the morning of the 12th, Augereau during the day, Dommartin to Montefreddo in the evening.

The ill effect of that delay was made good, as far as possible, by forced marches, and particular tasks assigned to certain of the troops had to be altered, but the programme developed in spite of all.

Massena was called upon to perform part of the task which belonged to Augereau. That very evening, he directed :

> The 21st half-brigade on Cairo;
> The 8th Light Infantry on Biesaro.

The distribution of forces, in the evening of the 12th, was therefore as follows :

Laharpe at lower Montenotte sending out patrols on Sassello;
Massena at . . { Cairo (headquarters); Biestro;
Joubert at San Donato (between Carcare and Cairo) with main guards near { Cosseria; Santa Margarita;
Augereau at Carcare;
Dommartin at Montefreddo (arrives very late);
Bonaparte at Carcare.

[1] The dearth of material of first necessity was such, that in Augereau's Division—to mention but one fact—1000 men out of 6000 had no muskets.

Augereau's delay bore certain consequences : Provera had 2000 men on the small ridge which separates the two Bormidas; he had the time to assemble them. Augereau and Joubert, by arriving in the morning, would have enabled the French to carry Cosseria and Millesimo

without difficulty; the affair, taking place the next day, was, on the contrary, to prove a costly one, and the castle of Cosseria was not carried until the third day.

In spite of this, Bonaparte carried out, on the 12th, the main item of his programme. He now occupied a central position between the Austrians who were falling back

on Acqui and the Piedmontese who, ignoring all that was taking place, were taken by surprise and remained scattered in their cantonments.

On April 13th, Bonaparte continued to carry out his programme: "To act in the direction of Ceva and beat the Sardinians," his main objective, and to follow up d'Argenteau on Spigno, his secondary objective." He writes to Serurier: "I attack to-day towards Montezemolo." And he repeats to Laharpe: "It is important to occupy Montezemolo to-day." This is then the main idea of the day. To its realisation Napoleon devoted the *main body of his forces;* to the secondary action he detached *as few troops as possible* and for the *shortest time possible.* With that main object in view, the action in direction of Montezemolo was undertaken by:

Serurier, having on his right Rusca, who was to link himself up with Augereau near Murialdo;
Augereau, following the main road;
Joubert, marching on Castelnovo via San Giovanni;
Dommartin, who, if he went beyond Montefreddo, was to place himself in reserve behind Augereau; in the contrary case, he was to overtake Rusca;
Menard (with one half-brigade) to stay in reserve at Biestro;
Massena and Laharpe were ordered to proceed early beyond Dego, send a few companies on Spigno, and afterwards fall back to the right of Augereau in order to act in the direction of Montezemolo.

Here, again, we have a *system of forces*, of *all* the forces, set up in order to attack the Piedmontese army.

In compliance with these orders, Augereau marches early on the 13th, marching on Millesimo (having Joubert and Menard under his orders). Provera had established himself with 2000 men on the small ridge between the two Bormidas; he was thus acting as connecting link between the Sardinians in Montezemolo and the Austro-Sardinians in Dego. Attacked in the morning of the 13th by Augereau's columns, he soon loses Millesimo, but entrenches himself in the old castle of Cosseria (8 a.m.). Augereau attempts in vain to knock down the walls with four small guns and one howitzer; he tries in vain to parley in order to get hold of the place. At

4 p.m. he is reduced to attacking with the 6000 men he possesses. The attack only leads to costly failure and heavy losses, more particularly for the Joubert brigade which has to be relieved by the Dommartin brigade. A more regular form of attack has to be resorted to during the night, a battery is set up at a short distance from the castle.

Provera surrenders on the 14th, at 8 a.m.

However, Colli, having been informed early on the 13th of the attack of the Republicans, has concentrated some forces at Montezemolo. Bonaparte is therefore compelled, while continuing to carry out his plan, to take Colli's manifestations into account, and to hold him in check while he carries the successive obstacles barring his own progress.

On that same day, the 13th, while Augereau, playing the part of an advance guard in the direction of Montezemolo, was beginning to move, Massena had received the mission to carry Dego, where it was thought that nothing but fugitives would be found.

Laharpe and Dommartin were marching on Cairo in order to reconstitute a mass which would allow for manœuvring.

But the four battalions which Colli had sent to Dego at Beaulieu's request had arrived there on the 12th. Hearing of the events of the day, they stayed there on the 13th with the remains of the Rukavina column. Massena arrived in the course of the morning with about 2000 men.[1] Inhabitants of the country and deserters informed him of the situation. He realised his forces to be too small for attack.

Such reinforcements as might reach him—Laharpe, Dommartin—arrived in Cairo no earlier than between eleven and noon. At that moment also, the castle of Cosseria was making its unexpected stand, Colli was showing some strength in the neighbourhood of Montezemolo. A reserve must be formed in case he should attack. To this end, Bonaparte kept Laharpe and Dommartin in Cairo. Massena was not reinforced. As

[1] Massena had at his disposal only one battalion of grenadiers and carabineers, 500 men strong at the utmost, commanded by Rondeau, and the 1st and 3rd battalions of the 21st half-brigade, about 1600 men strong.

can be already seen, the most simple moves of an adversary have the effect of delaying the march of the most audacious of chiefs as well as of retarding the development of a plan.

Bonaparte did not dream of cutting his reserve into two parts in order to reinforce simultaneously the actions on Cosseria and Dego, for this would weaken him everywhere. The attack was to be carried out on one side: Montezemolo; on the other, it was to be stopped until further orders.

As for Massena, he had assembled his column near Rochetta Cairo, which he had occupied. What did he propose to do there, now that he was reduced to action with his own forces alone?

Powerless in front of Dego, he might have marched to the sound of gunfire which was heard in the direction of Cosseria. Failing orders for this, he did not do so.

He might have confined himself to taking up a defensive position at Rochetta Cairo in order to prevent the adversary from debouching on Cairo. By acting in that way, he would not have prevented the enemy from manœuvring in other directions.

He kept faithfully to his orders, and to his function, which was that of an advance guard on the road to Acqui, a thing which implied, above all, the paralysing of all enemy attempts coming from that region.

Held up before Dego and unable to drive the adversary from that place, we shall see him attack indeed, but by means of a mere reconnaissance the effect of which, reconnaissance though it was, and only that, besides supplying information, was to *fix*, to *hold* these superior forces, and to *make ready for the main attack* on the following day. Massena at about two ordered the reconnaissance on Dego.

The Dego Reconnaissance

(*April 13th*)

(See Sketch No. 2 in pocket at end of volume)

To this end, the 21st half-brigade (with two guns) climbed up the heights north of Rochetta Cairo; numerous patrols, put forward as skirmishers, pushed on and reached Costa Lupara, Vermenano and the Bric of

Santa Lucia; two guns (the whole available artillery) unlimbered at Coletto and opened fire. The main body of the 21st half-brigade followed up in reserve, ready to support the elements engaged.

In order to extend the reconnaissance further to the right, the Rondeau column (about 500 men) marched on Gerini, via Massalapo.[1]

In order to extend the reconnaissance further to the left, Massena utilised the 70th half-brigade which had just arrived with Cervoni. The latter tried to cross the Bormida by the ford at the mouth of the rivulet of Bouereu; he had to go back to the bridge of Rochetta, where he left a detachment, while he went on in the direction of Sopravia with the remainder of his force, preceded by numerous patrols which were immediately thrown out as skirmishers when they came in touch with the enemy.

To such actions, backed up by intense infantry and artillery fire, the enemy, who believed himself attacked, replied with all his means: infantry fire, artillery fire. It had not the slightest effect on the thin, sparse French numbers: what it did do was to disclose the dispositions taken by the Austro-Sardinians and to show Massena which positions were occupied.

Not venturing to hold, as in 1794, the heights on the left bank of the Bormida, the Austro-Sardinians had established themselves on the right bank. The village of Magliani forms, roughly, the centre of the position, the right of which is at the Bric Rossa, while the left is at the Bric della Stella. A first line of defence was established on the ridge of the Costa and in Dego Castle.

The artillery of the position may be estimated at sixteen or eighteen guns; that position contained besides on the main strong points a number of works, sketchily traced of course, and a redoubt made of stones without mortar at the Bric Cassano (north-west of Magliani).

Such a set of works could not be carried by sudden attack. Early that night Massena, in agreement with

[1] Its itinerary was: down from the Rochetta heights into the Bouereu valley, above C. Ferriera; up again by the path of the Bric de Lobe on to the hill of Casteriole, that is, along the ridge around which the Bouereu river makes a very marked loop while flowing towards C. Nicolena; crossing near Prestaldi the rivulet Rovera, tributary to the Grillaro, and marching on Gerini.

Bonaparte, who had arrived on the spot, ordered his troops to fall back. He assembled them at the bivouac of the preceding night, south of Rochetta Cairo, where he organised a defensive position so as to be able to resist in case the enemy should attack in his turn.

Such is a reconnaissance directed by Bonaparte and by Massena under very difficult circumstances.

1. Even to these ardent men, the conduct of troops did not consist in rushing like a wild boar on the enemy. You must act with *full knowledge of the case*, and proportion your aims and actions to your available means. You must begin by *reconnoitring*.

2. In order to reconnoitre, one must compel the enemy to *show himself* wherever he may be. To this end, he has to be *attacked* until his position and his front has been clearly defined. Hence several attacking columns are necessary. The attack, however, is made with the intention *not to bring on the action;* therefore each column will only supply, ahead of itself, some patrols, some skirmishers who will advance, fall back, easily disengage themselves at a given moment. The best means are : mainly *action from a distance, firing at the longest range possible*, always so acting as to exercise pressure on the enemy without allowing oneself to be *tied up*.

In the rear of the combatant troops a number of main bodies were held ready to act as *supporting troops* (being established on supporting points and on points where there was observation for fire). The points of communication and assembly in the rear were also held (Bormida crossing, village of Rochetta).

In any case, the day of the 13th was thrown away so far as it concerned the development of Bonaparte's plan, which was to march on Ceva. It had been lost owing to the resistance of Cosseria (due to Augereau's delay), and to the resistance of Dego; and as long as Cosseria held out, Dego could not be attacked in force.

Two thousand men had been pushed on by Augereau to Millesimo : this was the only result attained on the 13th.

Moreover, this army all concentrated round Cairo lacked food.

However, on the morning of the 14th, Provera surrendered, the road from Millesimo to Montezemolo, so

ardently desired, lay open; might it not now be possible to resume the carrying out against Colli of the plan which Bonaparte had nursed so long, which ill-luck had delayed for two days, which, moreover, the want of food, the complete penury and fatigue of the army urged him to conclude? Well, no. So long as Dego was not captured, there was no true security on that side: Beaulieu might assemble important forces between that place and Acqui, and thus endanger all the progress of the army engaged on Montezemolo. Dego must be attacked and captured. The reconnaissance of the 13th had shown all the importance of that position; that importance might be greater still on the 14th (through reinforcement of works and arrival of troops).

Whatever be the necessity for marching on Montezemolo without delay on the morning of the 14th, the main body of the army was ordered to take the direction of Dego. During that morning Massena was to be reinforced by:

Laharpe; The Menard Brigade Dommartin Part of the Augereau Division under Victor	*Total:* 18,000 men available before *Dego.*

The Attack on Dego
(*April 14th*)

While keeping the adversary scattered, Dego could thus be vigorously attacked.

The situation of the place had been disclosed by the reconnaissance accomplished the day before; according to the latest information, no new troops were supposed to have arrived there. Bonaparte then made up his mind to use his numerical superiority in order to secure a *complete*, *decisive* result, and capture the enemy forces in Dego.

To this end, Massena was ordered to attack on the right bank in two columns.

The *right column* under Lasalcette,[1] led by Rondeau,

[1] It contained (1) the Rondeau detachment, formed by the grenadiers of the 21st, the carabineers of the 8th Light Infantry, and 200 men of that half-brigade, in total 400 or 500 men; (2) the 1st Light Infantry, 1000 or 2000 men.

whose force formed the advance guard, proceeded to Gerini by the same road as the day before and reached, at about 1 p.m., the Bric of Sodan.

Following that ridge, the advance guard marched on the Bric del Caret, where it arrived and established itself in time to drive back first a single reinforcing battalion which was arriving from Squanetto to Dego, then two more battalions. After thus getting hold, by its advance guard, of one of the roads to Dego, the main body of the column marched in the direction of Majani, pushed back the posts della Stella and del Poggio, and connected itself with Massena at the foot of Mount Gerolo, at about three.

The *left column*, under Massena,[1] had slowly gone into action in order to give the others time to invest; during the *greater part of the day* it occupied Vermenano, Costa Lupara, keeping up fire on the enemy with numerous *skirmishers* and the *two guns*, which was all the artillery it possessed. This was a mere *demonstration:* much firing, few forces in action, points strongly held in the rear of the combatants. *Only at* 3 *p.m.*, seeing Lasalcette's progress, having, moreover, established a connection, Massena, his *reserves in hand*, rapidly climbed the slope of Castello, deployed, carried and went past that place, deployed again before Costa, stormed Mount Gerolo in company with Lasalcette; the defenders of Gerolo fell back on Majani, where they found the right of the Piedmontese equally driven back by Laharpe.

Laharpe had manœuvred [2] by the left bank of the Bormida, which he had crossed at Rochetta. He was followed by 200 cavalry.

He proceeded on to Sopravia, left one battalion [3] to occupy Bormida, in order to invest the enemy and protect the artillery (three guns of eight) which established itself on the height west of Bormida, preparing at favourable range the attack on Castello by Massena. Advancing further on via Sopravia, the division again crossed the Bormida at the ford of the Pra Marenco, where it left one [4] battalion and formed itself into three columns

[1] 21st half-brigade, 14th temporary. } about 2400 men.
[2] With the 70th and 99th half-brigade.
[3] Of the 99th. [4] Of the 70th.

in order to attack the Casan redoubt. The three columns were :

1. To the right, under General Causse, 1500 or 1600 men [1] via Piano.

2. In the centre, under Cervoni, 900 men [2] via the Bric Rosso.

3. In echelon behind to the left, under the Chief of Staff of the Boyer division, 800 men [2] plus cavalry (200 men).

The Piedmontese withdrew from the Casan redoubt on Mojani, wherefrom they rapidly withdrew through the valley of the Cassinelle. Trying to reach the road to Spigno, they found that road barred by the advance guard of Rouleau, who fired on them from the Bric del Caret ; pursued at the same time by Laharpe's 200 horses, both battalions were compelled to surrender; their artillery had not left its entrenchments.

Although the march on Montezemolo was becoming urgent, see what a methodical spirit was exhibited !

1. Utilising numerical superiority in order to secure a radical decision.

2. Progressively carrying out the investment, with a minimum of forces, owing to the use made of places like Bormida, etc.

3. Patiently, slowly, economically preparing the decisive act all day long, then carrying it out swiftly, between 3 and 4 p.m., with nearly the whole of the forces present acting simultaneously and together.

This we shall find to be a constant feature of the operations conducted by those ardent men : Bonaparte, Massena, Lannes.

The whole day is spent in *manœuvring* in order to prepare the intended decision; but the manœuvre is undertaken against an enemy who has been *reconnoitred* here the day before, *fixed*, *immobilised* the whole day by Massena who attacks, but only to keep the enemy *busy ;* who, with that end in view, only brings into action *skirmishers* and the *whole available artillery*, until all the columns, after extending the investment and overcoming, under cover, the difficulties of the ground, have managed, by still using covered approaches, to place

[1] Two battalions of the 99th.
[2] One battalion of the 70th.

themselves at a short distance in front of their objectives, in columns of attack linked up each with its neighbours.

The use and combination of arms are equally worthy of attention; the artillery do nearly the whole of the demonstration and prepare the attack on important strong points such as Castello; cavalry join that part of the decisive attack which has to go the longest way, in order to scout, cover, and complete the decision.

At the very moment the affair came to an end, Bonaparte (who had already sent the Menard and Dommartin brigades on to Montezemolo) ordered Laharpe to start immediately for Cairo.

Massena was to guard Dego. Lack of food was, however, absolute. The fight being at an end, his division dispersed to loot the neighbouring villages; they were surprised in the greatest state of disorder by an enemy detachment and driven out of Dego. The division could only be rallied on the morning of the 15th, at about 10.

As we have seen, Beaulieu, on leaving Voltri, in the afternoon of the 11th, had sent three battalions under Wukassowitch to Mount Pajole, thence on towards Sassello. On the 13th, knowing that Dego was able to offer some resistance, he had prescribed a concentration there of the available (in all, ten) battalions scattered at Sassello, Acqui, Pacetto, Spigno. Five of them were beaten on the 14th north of Dego by Massena's advance guard; five, in consequence of an error, only arrived on the 15th just before daybreak. These were the two battalions left by d'Argenteau at Lezeni and the three of Wukassowitch.

Wukassowitch, who commanded the whole, did not hesitate to attack, carried Dego, drove back Massena (whom Laharpe received). Bonaparte made again for Dego with all these forces and carried the place—but only towards evening, and after a rather lively action.

In spite of Wukassowitch's advice and request, Beaulieu had failed to send him any reinforcement. His battalions at Voltri were the only ones untouched, and he could not get them up quickly.

This new Dego affair made Bonaparte anxious; he feared lest the Austrians should counter-attack on the 16th; information received justified those fears. For

that day he ordered Massena to keep on his guard at Dego; Laharpe to post himself on Mioglio and Sassello and send out reconnaissances towards Acqui; Headquarters to remain at Carcare.

As you see, two further days, those of the 15th and 16th, are again wasted so far as the execution of the plan is conceived, the manœuvre on Ceva.

However, the Piedmontese have evacuated Montezemolo; Augereau occupies that place, while Rusca proceeds to Priero and Serurier to Malpotremo, thus nearing the camp at Ceva.

On the 16th, Serurier attacked the camp established on the ridge which, starting from the town, leads down to the Pedagera. He failed. On his right the Joubert brigade were panic-stricken and ran away, while the Rusca and Beyrand brigades were also thrown back.

On the other hand, the news received by Bonaparte was on the whole reassuring. The seven battalions at Voltri had been recalled towards Acqui, where the Austrians were concentrating. The *attack on Ceva was to be resumed* by Serurier, Augereau, Massena: the latter arriving to this end in Monbarcaro (from which point he maintained the separation between the Piedmontese and the Austrians), attacked the left of the enemy. The army was also guarded by Laharpe, who occupied Dego and sent out reconnaissances on Acqui.

On the 17th, the French army found that the camp at Ceva had been evacuated.

Such is the outcome in practice of the new theory of war, based on the principle of economy of forces and characterised in the highest degree by initiative, attack, and well-conceived action.

1. Action in one direction (namely that which is implied in the strategical plan) by means of tactics; that is, by using military means as skilfully as possible. For instance, once the direction of Voltri had been abandoned, the army marched first on Montenotte, then on Dego; once Dego had been given up, on Millesimo; Millesimo having been settled, the army came back on Dego, etc.

2. In each of the successively adopted directions, *victory* is secured by using *all the forces*, or at least the *main body;* in the other directions, *safety* is ensured by as few troops as possible, their mission being not to beat

the enemy, but to delay him, to paralyse him, to reconnoitre: so Cervoni in face of Beaulieu, Massena at Dego, Serurier in face of Colli.

3. In strategy as in tactics, a decision is constantly enforced by mechanics, by applying to part of the enemy forces a main body made as strong as possible, by devoting to that task with the greatest possible care all the forces which have been freed elsewhere. Once this part of the enemy forces has been destroyed, another has to be dealt with promptly by again applying the main body, in order to be successively the stronger on a given point at a given time.

Bonaparte wrote as early as in 1794: "The same is true of war as of the storming of a fortified town: fire must be concentrated on one point. As soon as the breach is made, the balance is upset; nothing else is of any avail; the town is taken. . . . Attacks must not be scattered, but on the contrary, combined."

In order to do things in that way, *forces* must be constantly arranged according to a system:

1. On the periphery, a number of advance guards
   - (1) attacking in order to reconnoitre;
   - (2) to fix the enemy, to the benefit of
   - (3) the main body;
   - (4) or parrying an attack in order to cover the main body;

2. In the rear, the *main body* manœuvring in the direction of the objective aimed at.

The main body and the advance guards must be in constant communication with each other, so as to allow, at a given moment, the transference of the whole weight of the mass in the direction of the objective attacked.

A conversation between Bonaparte and Moreau will illustrate this new conception of military mechanics. The meeting took place in 1799, at Gohier's; and Gohier relates it in the following manner:

"These two generals, who had never yet seen each other, seemed equally pleased to meet. It was observed that during this interview, both, for one moment, looked at each other in silence. Bonaparte was the first to speak; he told Moreau how anxious he had been to make his acquaintance. 'You are just come

from Egypt as a conqueror,' answered Moreau, 'and I am just home from Italy after a great defeat. . . .' After giving some explanation of the causes of that defeat, he concluded: 'It was impossible to prevent our gallant army from being overwhelmed by so many combined forces. Big numbers always beat small ones.'

"'You are right,' said Bonaparte, 'big numbers always beat small ones.'

"'Still, General,' said I to Bonaparte, 'you have often beaten big armies with small ones.'

"'Even in that case,' he said, 'the small numbers were always beaten by the big ones.'

"This led him to explain his tactics:

"'When, with inferior forces, I was met by a large army,' he said, 'having quickly grouped my own, I fell like lightning on one of the wings, which I routed. I then availed myself of the disorder this manœuvre never failed to produce within the enemy army, so as to attack it in another part, and again with *all* my forces. I thus beat the enemy piecemeal; and the ensuing victory was invariably, as you see, a triumph of the larger number over the smaller.'"

The art consisted in *securing the numbers*, in having the numbers on the selected point of attack; the means of doing this was: *an economy of forces.*

Such mechanics ultimately led to the utilisation to the utmost of the *disorder* this manœuvre produces within the enemy army, as well as of the *moral superiority* created by the same manœuvre within one's own army.

That was *Napoleon's War.*

CHAPTER IV

INTELLECTUAL DISCIPLINE—FREEDOM OF ACTION AS A FUNCTION OF OBEDIENCE

"I am little pleased. . . . You have received an order to proceed on Cairo, and you have done nothing of the sort. *No event ought ever to prevent a soldier from obeying;* skill in war consists in solving any difficulties that may make an operation difficult, not in allowing the operation to fail."—NAPOLEON.

WE have seen what sort of mechanical device this rigorous *theory* of war may lead to, as it increases in severity: the principle of the economy of force. In order to fight a battle with all one's forces combined, those forces must first be divided into two parts and used in two different ways:

The first group, the *main body*, the battle divisions of Bonaparte (Massena, Augereau, cavalry), absolutely reserved for the battle, must find that its task has been facilitated before the moment when their striking power is thrown in to its utmost.

Each must always communicate with the other so that both may be able to strike together on the same point as an organised *system of forces.*

We will now study the next corollary to that theorem of Economy of Force, namely the *principle of Freedom of Action.*

First of all, where does it come from? Why is it necessary?

As we have seen, the starting-point of modern war is the *working of masses,* tending to some *common* action in which the largest possible number of forces are to take part. Such common action was submitted by Clausewitz to a twofold condition: *union of forces in time and in space.*

Those words: *common action, union of forces,* mean the reverse of independent, isolated, or successive, action

which would fatally lead to *dispersion*. It is obvious, therefore, that any one of the units which is a component part of the whole force is not free to go *where* it wishes (union in space), nor to arrive *when* it likes (union in time); to allow itself to be directed by its chief's private views, however sound they may appear to be; to act on its own account; to seek the enemy and fight him *where* and *when* it likes—even should the undertaking be a successful one.

Discipline is the strength of armies. Armed forces are organised and commanded above all in order that they should obey.

We have seen, beside this, that when the moment had come to practise this working of masses, to apply the mechanical scheme supplied by Economy of Force, Bonaparte in 1796

organised and divided his army into { 1. A main body. 2. Advance guards.

The *main body* was organised to strike, to give the adversary the decisive blow.

The *advance guards* were organised to facilitate this function of the main body, this use made of the main forces; divisions used as advance guards were therefore designed to play a well-determined *subordinate part* and to practise a perfect discipline.

Are the *battle divisions*, the troops of the main body, less subordinate? Evidently not. They receive their orders directly from Bonaparte. Each of them has to fulfil a programme set beforehand. We may say, therefore, that in this army there are none but subordinate units; that, with the exception of Bonaparte, who alone *commands*, all other chiefs do nothing but *obey* or, rather, begin by obeying before they command.

If from the army of 1796 we go on to the army of 1806 (several army corps), of 1870 (several armies), of the future (several groups of armies), we see nothing but *subordinate chiefs, subordinate units.*

The generalissimo alone indulges in *art*, in *strategy* in the fullest sense of the term, while the others confine themselves to *tactics*, to *prose.*

He alone writes music and leads the orchestra. The others only play their part in that orchestra.

Be it therefore a matter of divisions in advance guard or of battle divisions, of armies, army corps, divisions,

brigades, regiments as in our present organisation, there is nothing but *subordinate units.*

Every chief of those various units must therefore, while concentrated on command, be careful to obey; before dictating his own orders, he must draw his inspiration from the orders he has received. In what measure and how? That is what we are now about to examine.

To obey is difficult in war. For one has to obey in presence of the enemy and in spite of the enemy; amidst danger; amidst various and unforeseen circumstances; in face of a threatening unknown; under a physical strain, moreover, due to many causes.

"While dispositions taken in peace-time may be thought out at leisure and are likely to lead without fail to the intended result, the same is not true of forces in war, of operations. In war, once hostilities have begun, our will soon meets the independent will of the adversary. Our dispositions clash with the freely chosen dispositions of the enemy" (Moltke).

How, then, can an order received be carried out? How can a programme, a theory, develop in practice, unless it be by maintaining one's freedom of action in spite of the enemy? "The art of war is the art of keeping one's own freedom of action" (Xenophon).

On the eve of Montenotte, we have:

Laharpe, who has to go and help the Rampon half-brigade;

Augereau, who, starting from Savona at midnight, must come and place himself in reserve in the rear of Laharpe;

Massena, who, starting from Finalè in two columns, must reach lower Montenotte;

Serurier, who will have to make a demonstration on Ceva;

Cervoni, who will have to hold the road to Voltri;

Rampon, who will have to make a stand at Montenegino.

There are indeed as many different parts as there are different bodies of troops; as many distinct missions, all aiming at securing a common result: to wit, concentration; but all acting in presence of the enemy and by various means which will make their separate appeals to each commander's ability.

The result is therefore difficult to see and to reach. In proportion as numbers increase, and with them time and distance, the road for the subordinates becomes longer and more difficult. On its side the supreme command, in the narrow sense of the word, loses something of its *precision*. It may still determine the result to be obtained, but no longer the ways and means to reach it. How can these numerous scattered troops be sure of arriving in time, unless each of them keeps a clear vision of the single goal to be attained, unless each of them keeps the freedom of acting towards that end? In other words, we must have:

A mental discipline, as a first condition; showing and prescribing to all subordinates the result aimed at by the commanding officer.

Intelligent and active discipline, or rather *initiative*,[1] a second condition, in order to maintain the right and power of acting in the desired direction.

Here comes in the superior notion of a *military spirit* which makes an appeal, first of course to the will, after that to the intelligence. Such a notion clearly involves an act of deliberate thought, of reflection; it excludes mental immobility, want of thought, intellectual silence —all of which are well enough for the rank and file who have but to perform (although it would certainly be better for them to understand what they have to perform), but which would never do for the subordinate commander: the latter must bring to fruit, with all the means at his disposal, the scheme of the higher command; therefore he must, above all, understand that thought, and afterwards make of his means *the use best suited to circumstances*—of which, however, he is the *only judge*.

A commander must, then, not only be a man of will (that we take as a matter of course), but also a man capable of

understanding and of *combining* } in order to obey.

To *passive obedience*, such as used to be in favour

[1] "Initiative is the manifestation of personal will helped by judgment and acting in compliance with the schemes of the high command." —Von der Goltz.

under the absolute systems of the past, we oppose *active* obedience; it is an implicit consequence of the appeal constantly made to initiative as well as of the tactics of lesser independent masses.

Such a method of obeying will manifest itself by *security*, by the art of acting *under protection*.

Moreover, we shall see this notion of freedom of action (which is designed to safeguard our spirit of active discipline, and which results from the need of supporting the action of the main body by the combined acts of all the performers however separate the latter may be) generalise itself (just as we saw was the case with the economy of force) so as to become, one may say, *fundamental* to all acts of war. This justifies the absolute nature of the following principle: "The art of war is, in the last resort, the art of keeping one's freedom of action" (Xenophon).

Indeed, be it a question of means of war or of operations, we have just seen that our constant preoccupation must be to keep that *freedom:* we must be free to proceed to Montenotte, to stay there, to operate on Ceva. And when at the end of the war there will be a victor and a vanquished, in what will consist the difference between those two situations unless in the fact that the first will be *free* to do to, and to exact from, the other what he wills; while the *latter* will be *compelled* to do and grant anything the victor may prescribe?

We must constantly penetrate our minds with this necessity of safeguarding, above all, our own *freedom of action*, if we want to find ourselves, at the end of an operation (still more at the end of a *series* of operations) free; that is, victorious; not ruled; that is, vanquished.

A constant preoccupation, while we prepare and combine an action against the enemy, must be to escape his will, to parry any undertaking by which he might prevent our action from succeeding. Any military idea, any scheme, any plan, must therefore be connected with the conception of *security*. We must, as if we were fencing, attack without uncovering ourselves, parry without ceasing to threaten the adversary.

An historical instance will illustrate what security is in the wider sense of the word.

On the 4th of August, 1870, the Fifth French Corps found itself in the following situation:

One of its divisions (the 3rd, General Guyot de Lespart) was at Bitche with one cavalry regiment;

Two others (the 2nd, General de l'Abadie, and the 1st, General Goze) at Sarreguemines and its neighbourhood, having with them three cavalry regiments and six batteries of the artillery reserve, as well as the supply column of the army corps.

In the evening of that day, General de Failly, commanding the army corps, received from general headquarters at Metz the following dispatch: "Support with your two divisions your other division at Bitche." They had, in fact, heard in Metz of the check at Wissembourg, and did not doubt that the invasion of Alsace by considerable forces would ensue very shortly. It had then been decided to reinforce the troops of Marshal de MacMahon.

On the evening of the 4th, then, General de Failly had received the order: "Concentrate all your forces at Bitche." That was a military order, an order which touched his *conscience* and *discipline*. The thing must be looked at from that high standpoint in order to establish firmly what is meant by discipline; something inseparable from conscience.

To be disciplined does not mean that one does not commit any breach of discipline; that one does not commit some disorderly action; such a definition works for the rank and file, but not at all for a commander placed in any degree of the military hierarchy, least of all, therefore, for those who find themselves in the highest places.

To be disciplined does not mean, either, that one only carries out an order received to such a point as appears to be convenient, fair, rational or possible. It means that one frankly adopts the thoughts and views of the superior in command, and that one uses all humanly practicable means in order to give him satisfaction.

Again, to be disciplined does not mean being silent, abstaining, or doing only what one thinks one may undertake *without risk;* it is not the art of *eluding responsibility;* it means *acting* in compliance with orders received, and therefore finding *in one's own mind*, by effort and reflection, the possibility to carry

out such orders. It also means finding in *one's own will* the energy to face the risks involved in execution. In a high place, discipline implies mental activity and a display of will. Laziness of mind leads to indiscipline, just as does insubordination. In either case it is an error; a guilty act. Incapacity and ignorance cannot be called extenuating circumstances, for knowledge is within the reach of all who seek it.

Anyhow, in execution of the orders received, Failly ordered on the evening of the 4th:

His first division to advance on the main road to Bitche as far as possible:

The 2nd was only to move the day after, and only partially. It included two brigades (Maussion and Lapasset).

To set them moving on the evening of the 4th would have meant leaving Sarreguemines without troops. But numerous enemy patrols, which of course did nothing more than exchange a few shots with our skirmishers, had for several days been seen along the frontier. Therefore it was not deemed possible to abandon Sarreguemines on the 4th. For the same reason, it could not be abandoned on the 5th. The same motives were again to be put forward at Rohrbach, at Bitche; at each place the command would act in the same way—occupy all threatened points—and the Fifth Corps would not arrive at all. Instead of going to Bitche, the Commander was guarding everything; instead of obeying, he was guided by *personal views*. This is *mental indiscipline*. Results were not long delayed.

On the evening of the 4th, the 1st division (Goze) had covered four miles; it bivouacked at Wissing farm, one mile and a quarter from the frontier.

On the 5th, it proceeded from Wissing farm to Fremdenberg farm, two miles west of Bitche. Having neither advance guards nor flank guards, it spent the whole day in covering the fourteen miles extending between those two points; it arrived in a state of exhaustion.

That same day, the Maussion brigade (of the 2nd division), the artillery reserve, and one cavalry regiment (1st Lancers) had left Sarreguemines.

The Lapasset brigade (of the same division) stayed

at Sarreguemines, waiting to be relieved by the Montaudon division, of the Third Corps. As that division would not arrive before the evening of the 5th, the Lapasset brigade would not move that day. Besides, there were also at Sarreguemines one cavalry regiment and the supply column of the army corps.

The Maussion brigade arrived in Rohrbach at noon, on the 5th, with the artillery reserve. It found the country in a state of excitement. In the evening before that day a Prussian cavalry regiment had crossed the frontier and had come near Rohrbach, after searching the neighbouring villages. The 5th Lancers, who marched with the Maussion brigade, had gone to meet the enemy, who had turned back.

A few moments after the brigade had arrived in Rohrbach the news came that some enemy infantry and cavalry had appeared; part of the brigade immediately took up arms, and skirmishers had already opened fire when it was found that the supposed enemy troops were none other than the 5th Lancers and one detachment of the 68th Infantry (of the Guyot de Lespart division), who had been sent out in the morning to reconnoitre.

Under those conditions, the Maussion brigade (which was still under orders to go to Bitche) thought they could not leave Rohrbach. They stayed there and reported to General de Failly, who approved of the decision taken.

In the reports from commanding officers of the Fifth Corps we find reappearing, with all their enchanting power, such empty words as "The *gap* (trouée) of Rohrbach," a remainder of antiquated methods revived by a thoughtless kind of geography.

A gap, a valley is not specially dangerous; there are roads outside the valleys, on the highest plateaus; indeed, there are roads wherever commerce or any kind of necessary connection requires them. But a road in a valley or on a plateau is only dangerous to us in so far as it is or can be used by the enemy. If the enemy does not utilise it, it does not exist tactically; that is, everything goes on as if it did not exist at all.

If, then, the enemy was not found (on the road in the gap) to be nearer than four or five miles away (the very length of the column), the Maussion brigade could

go on marching without being held up at Rohrbach. If the enemy was not less than thirteen miles distant, the brigade had nothing to fear for the whole day.

That information was not sought; but, as anxiety prevailed, the brigade stopped at Rohrbach; they spent the night from the 5th to the 6th under arms.

Paralysed by wrong topographical views, the brigade halted. It thus evaded its orders. Ignoring the true meaning of security, incapable of guarding itself, it did not take any rest and entered upon the following day's work with tired troops.

As for the Fifth Corps, the result of its numerous errors was the following situation, on the evening of the 5th:

Guyot de Lespart division, at Bitche;
Goze division, at Fremdenberg;
Maussion division and artillery reserve, at Rohrbach;
Lapasset brigade and supply column, at Sarreguemines.

Instead of aiming at *concentration*, wrong theories were suffered to rule right through. Instead of a *military spirit* and *mental discipline*, we have here *personal views*, *ignorance of security*. As a result, on the evening of the 5th, the army corps, which ought to have been, and could have been, concentrated at Bitche, was spread out on all the twenty-two miles between that place and Sarreguemines.

The picture was to change during that same night.

By a dispatch sent out from Metz, on the morning of August 5th, the Fifth Corps had been placed under Marshal de MacMahon. The Major-General, who transmitted this decision, believed the three divisions of the Fifth Corps had met at Bitche in the evening. Marshal de MacMahon, for his part, telegraphed at 8 p.m. to General de Failly:

"Come to Reichshoffen as soon as possible with your whole army corps." He ended by saying: "I expect you to join me in the course of to-morrow."

Here was again a very clear order to be carried out: to come as soon as possible.

General de Failly answered at 8 a.m. on the 6th:

That he could only send, on the 6th, the Lespart division;

That on the following day, the 7th, the Goze division would come to Philippsbourg (it was to guard Bitche on the 6th);

That on the same day, 7th, the Maussion brigade would come to Bitche;

That the Lapasset brigade and the supply column are at Sarreguemines, definitely cut off from the rest.

Thus (largely eluding, as you see, the spirit of the order received) he prescribed, for the 6th:

The Guyot de Lespart division to start for Reichshoffen;

The Goze division to halt (at Bitche) and not to be at Philippsbourg till the 7th;

The Maussion brigade to come to Fremdenberg;

The Lapasset brigade to remain at Sarreguemines (although it had been joined by the Montaudon division), because communications were cut. The enemy cavalry had cut the railroad at Bliesbrucken.

He had not dared to remove troops from Sarreguemines on the 5th; on the 6th the Goze division was kept at Bitche, in spite of the series of orders received. We find again the same causes acting as on the 5th; the effects were equally disastrous.

The same day, 5th of August, Lieutenant-Colonel de Kleinenberg arrives from Metz to Bitche, at General de Failly's headquarters; he announces the presence before General Frossard's corps of a Prussian army corps. That piece of news, added to the rest, again draws General de Failly's attention in that direction.

In any case the Lespart division alone receives the order to start early on the 6th, by the road to Niederbronn; but the division, owing to rumours brought by frightened peasants, puts off its departure; it does not start till 7.30 a.m.

No intelligence service has been regularly organised. Military decisions are dictated by rumours, founded or unfounded, generally magnified by fear; how could such decisions correspond to the reality of things?

General de Bernis, with the 12th Chasseurs, precedes the division. He has neither an advance guard nor a flank guard. Numerous roads and paths debouch on the left of the road followed; General de Lespart,

therefore, fears lest he should be attacked in flank. He advances only step by step. The column stops at every cross road. The country is being searched in front and on the side by cavalry, often even by infantry detachments. The whole division rolls itself up during that time; the column only resumes its advance after the reconnaissances have come back and stated that one may go ahead without danger.

A great number of halts result from this, to the particular bewilderment of the rank and file. Officers and men, excited by the noise of gunfire which has been heard since the morning, grow impatient of these delays and find that the measures taken are—to say the least of it—ill-timed. When they come nearer to Niederbronn, returning wounded are met, then fugitives; these latter become more and more numerous: they naturally say that things are going badly; they soon announce that the battle has been lost.

When they arrive on the heights overlooking Niederbronn, a retreating flood is seen crossing the town; it is five o'clock.

At that moment only are communications established between the two parts of the army of Alsace.

Marshal de MacMahon orders an infantry division which arrives on the heels of its cavalry regiment:

To deploy one brigade to the right of the road (to Fontanges);

And one to the left (Abbatucci);

Divisional artillery takes up a position.

Seeing that deployment, the Prussians stop; they have not gone beyond Niederbronn; such is the powerful impression made by the arrival of fresh troops.

The Guyot de Lespart division had been from 7·30 a.m. until 5 p.m.—more than nine hours—on the march to cover the fourteen miles distance from Bitche to Niederbronn.

The troops it was bringing up were physically and morally *exhausted*. Above all, these troops were *useless*. It was too late!

The whole of the Fifth Corps had failed to keep its appointment.

It was its fault that the battle was lost.—This was the first consequence.

Could that corps, at any rate, retrieve the harm done?

Could it reap the benefit of all the science and all the caution exhibited along the road from Sarreguemines to Niederbronn?

The general commanding the Fifth Corps, having been informed in the evening of the 6th, at Bitche, of the rout of the army of Alsace, was reduced, at 7 p.m., to summoning a council of war in order to examine:

(1) Whether it was possible for the Fifth Corps, reduced to three brigades (Goze division, Maussion brigade, artillery reserve) to risk a battle under the walls of Bitche.

(2) Whether that corps ought to follow the retreating First Corps.

Quite naturally the conclusion was in favour of retreat. Thus was settled the question how to occupy all the important points: Sarreguemines, Bitche, Rohrbach; and also the question of the dangerous roads which, because of imaginary dangers, such and such a division had not been allowed to take.

Battle, the tactical fact, having been missed, there was nothing but *danger* everywhere.

The men who had not been made to march for twenty miles in order to be led to victory, were now able and compelled to walk in a state of demoralisation for nearly sixty miles (Abbatucci brigade, from Niederbronn to Saverne) within thirty-six hours.

Without having fired a single shot, the Fifth Army Corps, composed of gallant troops, of undeniable value, had withdrawn from the struggle in a state of annihilation, of depression; the men had been deprived of their moral strength, they no longer trusted their own chiefs; they stood ready to be routed. In the army's judgment, and for a long time to come, that corps was to be held responsible for the defeat at Froeschwiller; rightly enough if the command and the rank and file are made jointly responsible; wrongly, however, if one perceives the truth, which is, that battles are lost or won by generals, not by the rank and file.

A number of *wrong theories*, the want of *military spirit* and of discipline (of the will and of the intelligence), complete ignorance of security, the organisation of which is the outcome of these military virtues, equal

ignorance of what *freedom of action* (which security alone makes possible) may mean: these were the causes of the disaster.

Wrong theories indeed! On the enemy side, Clausewitz had killed the fancy for old-fashioned sparring, and had commended *battle* as the only valid argument; all his disciples went spontaneously along that road. On our side, we had missed battle in order to keep a number of strategical points. The general commanding the Fifth French Corps was not an exceptional case in our army; he simply belonged to his *time*, to his *surroundings*.

Ignorance of security! Nothing, indeed, prevented that general from carrying out the very simple orders he had received: "Proceed to Froeschwiller with all your forces."

He was not prevented by *distance:* there are but thirty-three miles from Sarreguemines to Reichshoffen, and he had three days before him: 4th, 5th, 6th of August.

He was not prevented by the *enemy:* the Fifth Corps did not meet a single enemy on its way; everything had gone on, however, as if the enemy had been everywhere. They ought to have marched on *in spite of him;* they did not march on even in his absence! They allowed themselves to be guided by inaccurate informations which remained *unverified;* no *scouting* was done; no *security service* was organised. The Fifth Corps disobeyed on account of its ignorance.

One division was sent out, the Guyot de Lespart division. How did it act? We have seen how. For lack of intelligence, it started at 7·30 a.m. instead of starting at the very earliest hour (which might have been, on the 6th of August, something like 4 a.m.); it spent nine hours and a half in covering fourteen miles. It ought to have done it within five hours and a half. If it had started at 4 a.m., it would have been in Niederbronn by 9; having started at 7·30, it might anyhow have been there by 1 p.m. What slowness and what fatigue, on the contrary, to arrive so late—after the battle! But still if the division did manage to arrive at all, it was only *because the enemy had not shown himself in the slightest way.* Suppose any kind of enemy should be met on the road, suppose a battalion should attack at a cross road—then the division would have to risk

a battle on the very road it was following. In that case the march, already so weak and so painful, would have ceased altogether. Well, without any enemy to check it, the division arrived too late !

With an enemy present, the division would not have arrived at all.

How far we are from that play of military forces, that scheme of 1796, which we have just been studying !

That small army of Italy, concentrated from Savona to Finale, had three advance guards at Voltri, Montenegino, Ormea, that is, the possibility of acting in three directions. Here, there was no question of acting in any direction but one: and they were unable to do even that !

After seeing what was done in 1870 and what results were obtained, let us profit by this painful teaching; let us take the question up again on our own account; let us place ourselves, on August 4th, at Sarreguemines, where we receive the definite order: "Concentrate first at Bitche . . . proceed afterwards to Reichshoffen." (See Sketch No. 3 at the end of this volume).

What the principle of *freedom of action*, which should express itself by *organised security*, must enable us to do, is to *act* in spite of the difficulties on the way, in spite of the unknown, in spite of the enemy—that enemy who is supposed to be everywhere, who may be somewhere—it must allow us to arrive so as to comply with the intentions of our commanders and to safeguard discipline, which is the main strength of armies. Discipline, if we know how to fulfil its obligations, will give us victory on August 6th, keep up the moral within the Fifth Corps, and save an army corps for the French army. Such is the art of *serving* though *in command.*

How shall we approach the question? With a view to indulging in art or science? Not in the least; simply with a will to obey, to do what we are expected to do; also with the fixed idea of finding in our own minds the means of doing it, provided such means do exist.

What is the problem? We have to go to Bitche with the whole Fifth Corps, afterwards to Reichshoffen, that is all. Nothing must deter us from sticking to that

purpose. Therefore we have not to think in the least of facing the Prussian troops which threaten General Frossard; of guarding Sarreguemines, Rohrbach, Bitche; those points are only important to us in so far as they are helping or hampering the march of the Fifth Corps. If they can be crossed without difficulty, they do not count.

In order to go to Bitche, we must find one or more roads, such roads to be as safe as possible; and as these roads will never be entirely safe by themselves, we must, by means of special dispositions, give them the security they lack, that is, guarantee to the troops the certainty of reaching Bitche in spite of everything.

Let us consider the material part of the operation; from Sarreguemines to Bitche there are:

(1) The direct road via Rohrbach: eighteen miles; but that road runs very close to the frontier; to place there the main body of the army corps would make protection impossible.

(2) There is another road, going via Zetting, Diding, Kalhausen, Rahling, Montbronn, Lemberg; it is twenty-four miles long.

(3) There is a third road via Sarralbe, Saar-Union, Lorentzen, Lemberg: thirty miles.

The first one is dangerous, the third one, long; it is the second we must take with the main body of the army corps, and, as it will be difficult to cover the distance within one day, we shall have to start on the evening of the 4th. In order not to encumber the column, the convoys and parks which are *not* combatant elements will have to be thrown back on road No. 3.

Starting in the evening of the 4th on the road via Zetting, Diding, etc., the army corps will arrive, and bivouac at the end of the first day's march, at Wittring and Achen. It will reach Bitche the next day without difficulty.

But the enemy must be prevented from impeding that movement. This result will only be reached if, during the two days of the 4th and the 5th, either he does not appear (a thing *which depends upon himself*), or if, having appeared, he is kept at a distance; a thing *which depends on ourselves.*

The first point to solve is, then, to *know* if the enemy is appearing, if he shows himself in the region we are going to cross, or on the flank of the road we intend to follow. This makes *intelligence* necessary—an intelligence service by cavalry. And *where* should information be looked for? In all the directions by which the enemy may arrive in order to reach our own road, in other words, on all dangerous roads.

Such an intelligence, if sent in from a sufficiently distant point—twelve miles, for instance—supplies sufficient security if it is of a negative nature. Is it possible, however, to get that intelligence at such a distance? Not here, for a margin of security of twelve miles would compel our cavalry to operate towards Bliescastel and Deux-Ponts, that is, in the midst of an enemy country.

Intelligence may, besides, be of a positive nature; instead of verifying the enemy's absence, it may disclose his presence within a radius of less than twelve miles, and it will be then too late to take counter-measures, unless, by thinking it out beforehand, the case has been considered and solved.

It follows from all this that, while organising one's intelligence service by cavalry, one has to foresee at the same time the case when the enemy is reconnoitred within less than a day's march from the column. In order to ensure the freedom of marching then, it is necessary to locate *between the road followed by the column and the enemy* some resisting force capable of holding that enemy during the time the column is marching past. The army corps billeted at Achen, Kalhausen, Weidesheim, Wittring will be covered, on the 4th, by a flank guard composed of one brigade, three batteries, one cavalry regiment, and established at Woelfling, Wiswiller, at the junction-point of the dangerous roads.

The army corps will also send out a detachment of the regiment in Achen to occupy Singling.

The brigade at Woelfling will guard itself by a system of outposts which will include :

At Hesmscapel Farm : one company ; At the northern corner of the wood : one company ; At Gross-Rederching : two companies	*Main guards* occupying "points d'appui" on all the dangerous roads.

In the rear, a reserve (equivalent to one battalion), ready to proceed to any point of the attacked line, and established therefore at the *junction* of the dangerous roads.

Ahead of that system of *security by resistance*, the *intelligence* system should be arranged as follows :

One cavalry platoon at Bliesbrücken;
One ,, ,, at Rimling;
One ,, ,, at Obergailbach;
One squadron at Rohrbach.

(The remainder of the regiment to be left with the main body.)

The following day, the column, starting early, has to cover a distance of fifteen miles in order to reach Bitche, the head of the column starting from Kalhausen. It can do that without strain.

If the column starts at 5 a.m. (on August 5th), the head will be at Bitche six hours later, that is, at 11.15; the rear (length of the column : ten miles) will arrive four hours later, that is at 3.15 p.m.; and, after intercalating a long halt, the whole column may be assembled at Bitch by 4.15.

But in order to do this, one must not be impeded by the enemy. To this end, the flank guard must go and occupy in succession the dangerous roads while the column is on the march.

The flank guard must therefore be at Rohrbach when the column shall pass by Rahling, at Petit-Rederching when the column shall pass by Enchenberg.

How long will the flank guard remain at Rohrbach (for the column is not a mere point, it is ten miles long)?

As there are five miles from Rohrbach to Rahling, the flank guard may leave Rohrbach when the length of the column still to pass through Rahling is not superior to five miles. It is obvious that any enemy who should reach Rahling after that moment would strike in the void. As for the column, its head leaves Kalhausen at 5 a.m., arrives at Rahling at 6·30, its rear at 10·30; its head will be at Enchenberg at 9·30, its rear at 1·30 p.m.

Therefore the flank guard must be in position at Rohrbach at 6·30; it must start from Woelfling at 4·30. But, as we have seen, half the column will have

passed Rahling two hours later, that is at 8·30; only the latter half has still to pass by, the distance from Rohrbach being five miles, that is, a two hours' march; Rohrbach may then be left at 8·30 without peril. I may add that the flank guard may leave that place at least one hour earlier, owing to its intelligence service performed by cavalry.

For if its cavalry sends at 7·30 from Bettwiller the information "that there are no enemy forces at Bettwiller," we are certain that there will be no enemy at Rohrbach at 8·30, as there is between those two points a distance of two and a half miles; Rohrbach may be left at 7·30.

The flank guard will, then, proceed to Petit-Rederching and Holbach, holding the dangerous roads that lead to Enchenberg, and it will remain there until the length of the column to pass through Enchenberg shall be equal to the distance between that place and the point occupied by cavalry. In order that the flank guard may manœuvre, it must be able to reach at a convenient time the points of interposition, that is, the junctions of dangerous roads, and therefore *it must be nearer to those points than the enemy himself is.*

It will reach Rohrbach provided, when leaving Woefling, that it has received an information to the effect that the enemy is not at Rimling (for the distance between Rohrbach and Rimling is equal to the distance between Woefling and Rohrbach).

Again, when leaving Rohrbach, it will reach the next road junction, provided it has received an information to the effect that the enemy is not at Bettwiller; then the next junction, provided the enemy is not abreast of Hottwiller.

As has been seen, the functioning of the flank guard will be guaranteed by an Intelligence Service, scouting ahead and acting at a distance equal to that of the roads to be reached. To-day, then, the main body of the cavalry of the flank guard will pass through Rimling, Bettwiller, Hottwiller, etc.; an advance guard of one battalion with a cavalry platoon will precede the column.

Such are the dispositions under the protection of which the main body of our forces is certain to be able to march without a check.

An enemy coming on anywhere would find an inter-

vening force, a brigade capable of making a vigorous stand; capable in any case of holding out and of thus absorbing the enemy's activity; and this at a considerable distance from the marching column, the freedom of which is thus guaranteed.

As a matter of fact, there was no enemy in the region on August 5th, 1870; the Fifth French Corps did not find a single one; they might have arrived at Bitche :

The head of the column at 11.30 a.m.;
The rear at 4.30 p.m.

The order of the Field-Marshal might, at the time of its reception, have found the head of the column (one regiment) still able to march on—it had covered only fifteen miles—it might have been pushed on to Engelsberg (four miles from Bitche); but, besides, the Lespart division, which had not marched at all on that day. might have been pushed beyond that point. That division might have gone to Philippsbourg (nine miles), sending out a flank guard of one regiment, one battery, one squadron towards Sturzelbronn, at the Main-du-Prince.

The march would have been resumed the day after, 6th of August, without difficulty; one road only was dangerous in the morning, that of Sturzelbronn; it was held by a force able to *hold on a very long time*, having at its disposal a distance of five miles along which to retreat through a defile between mountains and forests.

If the march had been resumed at 6 a.m. at Philippsbourg and at 5a.m. at Bitche, the head would have reached Reichshoffen (six miles) at 8·30, the rear at 1·30 p.m.

It would then have been possible for the Fifth Army Corps to arrive at Reichshoffen in time; that result would have been obtained even had the enemy intervened on the flank of the road taken. The one necessary condition was that an appeal should be made :

To mental activity, so that the plans of the high command should be understood and endorsed;

To mental activity, so that physical means should be found in order to carry out those plans;

To mental activity, so that those plans should be carried out in spite of the attempts made by the enemy with a view to keeping his own freedom of action;

The condition, in one word, was that the course of action should fully comply with *discipline*.

CHAPTER V

THE SERVICE OF SECURITY

Dragomirow writes thus: "The principles of the art of war are within the reach of the most commonplace intelligence; but this does not mean to say that such an intelligence would be able to practice them." A teaching which should confine itself to no more than explaining those principles, without troubling itself about practice, would therefore be useless.

With that very object of practice in view, we will now study in detail the functioning of the flank guard of the Fifth Corps.

We have seen how its forces had to be divided into a *main body* and a *security of service*, in order to enable the army corps to reach Bitche in spite of the enemy; also how it was thus thought possible to obey, that is, to carry out a given order, by counteracting and neutralising the freely taken dispositions of the adversary.

We have equally seen by means of what calculations of time and of co-ordinated information the main part of the flank guard might have managed to interpose itself, at a suitable moment, on the junctions of the dangerous roads.

Let us discover in our present study how, with the enemy coming on, this service of security should function, what tactics, what attitude, it ought to adopt in order to fulfil its task.

Let us examine whether these measures, taken with a view to ensuring security, which we have deemed *necessary*, are in fact *sufficient*.

To this end I have supposed that an enemy force, at least one division strong, had taken up its place, on August 4th, 1870, near Alt-Altheim (three and a half miles from the frontier, seven from Bettwiller), and had set out the next day with the intention of keeping the French Fifth Corps back in the hills, of preventing its

junction with the forces in Alsace. By *concentrating* his means of action near the Sauer, the adversary would also be attempting to keep his opponent's forces in a state of *dispersion*.

We have established that, under those conditions, the Fifth French Army Corps of 1870, had it been attacked by the enemy, would not have succeeded in reaching Bitche, or even in bringing to that place a single one of its component elements.

Let us study how that army corps, had it been provided with the protection we have devised, might have still managed to arrive in time.

In order to evacuate Enchenberg, the army corps has to march for :

$$\frac{6 + 13 + 16}{4} = \frac{35}{4} \text{ kilometres} = 9 \text{ hours.}^1$$

From Alt-Altheim to Enchenberg, there is $\frac{22}{4} = 5$ hours marching; were there not on the French side a service of security, an action would therefore have taken place certainly at Enchenberg.

The enemy division, the head of which has left Alt-Altheim at 5, arrives at Bettwiller (12 kilometres) at 8, if nothing has held it up. On the other hand, the flank guard has arrived at Rohrbach at 6.30. Already at that moment, its cavalry regiment is at Rimling, with posts at Erching, Guiderkirch (and frontier, Epping. The post of Guiderkirch, soon driven back by enemy squadrons, is reinforced by the cavalry regiment, which impedes the march of the enemy column towards Guiderkirch and the mill of Rimling; it informs the officer commanding the flank guard and covers the direction of Bettwiller.

The presence of that cavalry regiment compels the enemy, who has no superior cavalry, to use his infantry advance guard in order to clear the road. He has to start manœuvring. In order to reach Bettwiller, that enemy advance guard would have, supposing no enemy impeding it, to march for $\frac{12^k}{4} = 3$ hours (8 a.m.). But as opposing cavalry has appeared, some eight hours

[1] This calculation assumes that a mass of infantry can cover (on the average) 4 kilometres (2½ miles) per hour at least.

will be needed to reach that point. What has the flank guard done in the meantime?

Having started from Woelfling at 4.30, the head of the flank guard has reached Rohrbach at 6.30.

On arriving, it has covered the occupation of that place with a body of troops (2nd battalion) sent out to hill 376; it has also secured the power to act further, to go on marching eastward, by sending on an advance guard (1st battalion) to the station of Rohrbach. Such measures of security would enable it to stay a long time at Rohrbach without danger.

But, as we have seen, Rohrbach may be evacuated at 7.30 if by that time the enemy has not reached Bettwiller, a thing we shall ascertain from our cavalry. Moreover, it takes the brigade one hour to march past; if the head arrives at 6.30, the rear will pass through the same place at 7.30; Rohrbach would then be held in any case until 7.30, even without the column halting. Let us suppose, however, that, with a view to security, the column should halt there for half an hour.

It will arrive and assemble north of the place:

The head, having arrived at 6.30, will start again at 7;

The rear, having arrived at 7.30, will start again at 8.

This being intended, a report from the colonel commanding the cavalry regiment announces, between 6.45 and 7, that the enemy (cavalry first, then infantry) is seen marching on the road from Peppenkumm to Guiderkirch; that if he himself is compelled to withdraw with his squadrons, he will retire towards Bettwiller. This piece of news confirms the necessity of barring without delay the road to Bettwiller, Petit-Rederching, Enchenberg.

Moreover, in proportion as time passes, the occupation of Rohrbach becomes less necessary; the evacuation of that place may be prepared.

In view of these two facts, the brigade is transferred, as early as 7, from Rohrbach, 800 yards south-west of the railway station, to the main road (at the junction with the road leading up to hill 376); such troops as have just assembled march on in close formation, such as are in column of route keep to that formation; the artillery on the road.

Protection is ensured by the 2nd battalion kept on

hill 376, and by the 1st battalion pushed on to Petit-Rederching (occupied at 7.15); that is, by two advance guards, securing until further orders, the power of acting in either direction.

At 7.45, the whole brigade has reached the point aimed at; the 2nd battalion, on hill 376, is ordered to join up.

But, in the meantime, the officer commanding the 1st battalion, having arrived in advance guard at Petit-Rederching at 7.45, has thought out his mission. What is the problem he has to solve, as an advance guard of the brigade? It consists in preparing for the brigade to go into action against an enemy who may debouch from Bettwiller. What does the brigade require for such an action?

The *Space* necessary for the full employment of its forces;

The *Time* necessary for their arrival and deployment.

In order to achieve that double task, he orders his troops to *occupy* the *whole space necessary*, and places them in points where they may hold on for the *necessary time*. Of such points he has here: Petit-Rederching, hill 349 and hill 353.

One company is placed on each of those hills. The two others establish themselves at Petit-Rederching, which is at once provided with defensive works. At 7.30 the brigade continues its movement, protected on the road to Petit-Rederching and Bettwiller in the manner described; protected also on the road from Rohrbach to Bettwiller by the battalion on hill 376, which is about to become a rear guard and to withdraw along the ridge, as soon as the last element of the main body shall have left the second place of assembly.

Here we have again a main body keeping for itself the power to act to the right or to the left and manœuvring under a covering body.

At the same time the cavalry has been ordered to continue *delaying* the enemy's march, *reconnoitring* the strength of its column, *watching* the eastern roads via Hottwiller, etc.

The brigade arrives and assembles south of the junction of the roads leading to Petit-Rederching.

Intelligence arrives there at the same time.

A reconnaissance carried out by officers has observed,

by 7.30, an infantry and artillery column entering Guiderkirch and marching towards Bettwiller.

Infantry have occupied Bettwiller after 8 o'clock; a calculation of time suffices to settle the question and to make it clear that after this moment (8 a.m.) the road to Bohrbach is no longer of any interest; that, on the contrary, it is imperative to bar at once the road to Petit-Rederching, and later on the roads more to the east.

How may that road be barred? How may that enemy be held back? Carnot answers this question in the following way:

"The enemy will not fail to detach a corps on your flank in order to try and hold you back. You must station, with the object of facing that corps, one division which, *either by its own power, or by occupying some unassailable position, will either scatter him or hold him back.*"

We have, then, to resort to power, failing which we must resort to position. The second method will do all we need, for we are not expected to defeat, but only to hold, the enemy during the whole time the main column occupies in marching past.

Let us calculate that time: The head of the army corps will arrive in Enchenberg at 9 a.m.; four hours are necessary for it to march past; the rear will therefore leave that place at 1 p.m.

From Enchenberg to Petit-Rederching the distance is three miles and a half, that is one hour and a half's march.

In order that the enemy should be there at 1 p.m., he must have left Petit-Rederching at 11.30. In consequence, he will not be there in time, if he is kept until 11.30 at Petit-Rederching, or, later on, points nearer to Enchenberg. The officer commanding the flank guard must, then, find the means of *holding out* at Petit-Rederching *until* 11.30, or at Heiligenbronn until 12.30. It is now 8 o'clock.

How shall he manage so to hold out? If the enemy is not in force, the question is not a difficult one to solve. If the enemy is superior in numbers, some impregnable position must be resorted to (Carnot).

But there is no such thing as an impregnable position, for any position the defence of which is merely passive

is bound to be carried at last by a manœuvring enemy. Similarly, a fencer who does but *parry* is bound to be *touched* sooner or later.

It is the same with a warrior who puts his entire trust in his armour; a chink will always be found out in the long run.

However, failing an unassailable position (which does not exist), there are, especially with modern armament, numerous strong positions discoverable.

Owing to their volume of fire, modern arms make manœuvring under fire impossible; owing to their range, they make it necessary to take up fighting dispositions at a great distance, to deploy very far away; owing to the rapidity of their fire, such necessities may be enforced by even relatively small numbers.

Any occupied position unavoidably delays the adversary, provided the position be a good one. What is a *good* position in the modern sense of that word? A ground favourable to the defensive, which in its turn is composed of *fire* and *steadiness;* it is a site provided to this end with:

Points from which one may observe and fire at a long distance;

Obstacles, that is, " points d'appui ": strong points.

If that twofold condition is fulfilled, the enemy is compelled to manœuvre from a distance until the last moment (assault of the obstacles), to bring into action all his means, artillery, infantry, that is, to advance painfully, to lose his time while he wishes to march on. The points to be occupied here are hills 349, 353, Petit-Rederching.

But such a position will fall in the end, after a certain time which may not be sufficient for the army corps to march past. The necessary additional time will be secured then by occupying a second position. While organising a first position, we shall therefore seek a second one which we shall prepare.

This leads us to *the organising of action* in depth, to preparing a series of successive struggles in every one of which decision will be avoided, and therefore only part of our forces will be brought into action. And here we have the employment of forces governed by the special conditions in which we find ourselves.

What shall we put in the first position? There

should be no *premature deployment:* such a deployment might be effected in the wrong direction, as the enemy would not have indicated yet on what point he intended attacking; we should waste the greater part of our forces if we deployed at once.

What must be achieved is the *occupation of the position* by troops which make it possible to bring there *part* or the *whole* of the main body, as may be deemed convenient, when the right moment shall have arrived; when the attack shall have disclosed what point is threatened.

By *what kind of troops* ought the occupation to be effected? By troops *firing* at long range, for our intention is to compel the enemy to undertake a manœuvre as distant as possible. We shall therefore place in first line a certain measure of infantry, but all the artillery. In the development of our scheme we shall ultimately reinforce the advance guard in the following manner:

1st regiment having:
- 1 battalion at Petit-Rederching having at
  - Northern limit of Petit-Reder-ching: 1 company;
  - Hill 349: 1 company;
- 1 battalion at the north-western corner of the wood, having on plateau 353: 2 companies;
- 1 battalion in reserve south of Petit-Rederching.

Such a position will not be equally attacked everywhere. The adversary will, without doubt, try to carry it on the extremities, or at least by one of the extremities. A reserve is needed to parry that attack: the reserve of the 1st regiment will stand ready to support the wing attacked. If it is the right wing, then the 1st regiment will occupy the north-eastern outskirt of the wood. If it is the left wing, it will occupy the Tuilerie and the railway station.

Artillery is ready to establish itself on hill 353; it must only show itself when actually opening fire and should endeavour to fire at as long a range as possible on to the road to Bettwiller, so as to prevent its being used by the enemy.

The remainder of the brigade is assembled south of hill 356.

The cavalry scouts to the east, where there are still some dangerous roads left, and remains, to this end, in the ravine of Nonante.

The front of the position is about one mile wide, a front which, for one regiment reinforced by artillery, is quite convenient under present defensive conditions.

Once this first position is lost, we must have a second one that can bar the road from Petit-Rederching to Enchenberg.

The railway station, hill 356, the northern outskirt of the wood, Halbach, will constitute a second position, with a reserve placed west of Siersthal.

A front of one mile and a half would obviously be somewhat long, if we intended to resist effectively with only one brigade, but the position includes 1500 yards of woods which can be easily held with small forces.

In the second place, it is necessary to hold Halbach, through which the enemy might take the direct road to Bitche or the road to Enchenberg via Siersthal.

In the third place, a frontal attack on the northern outskirt of the wood would lead to nothing; the enemy will attempt to extend himself to the right or to the left of the wood; it is therefore possible to oppose to that attack the greatest part of the forces (the reserve), provided the position has been at first only lightly occupied.

That occupation might be accomplished at a convenient time in the following way:

2nd regiment . . { Halbach / The Wood / Hill 356;

1st Regiment (leaving by the railway station a detachment of 2 companies) forms up again in general reserve west of Siersthal, at the junction of the roads leading from that place to { Hill 356, / Halbach, / Siersthal } { Three directions in which it may have to act;

Artillery south of hill 356;

Cavalry still scouting to the east on the road to Hottwiller; but as cavalry forces would find it difficult to fight there, on account of the woods, the main body of

the regiment may be transferred to the left, where there is open ground.

As you see, we have in line : the railway station, hill 356, the wood, but the whole of our forces are not employed on the line any more than they were previously on hill 349, Petit-Rederching, and hill 353; for what we are aiming at is not—to repeat it once more—a decision. Such a decision is unnecessary, and it might be beyond our power to enforce it.

We are merely attempting to *delay* the adversary by compelling him to manœuvre.

In what measure will the forces attached to each line be used up? That depends on circumstances. It is obvious that if, in presence of a *light occupation* the enemy stops, assembles, slows down, manœuvres for a long time, then the whole 1st regiment need not go into action on the first line; its 3rd battalion may then be strong enough to hold the railway station, hill 356, and the wood, when the moment shall come. If, on the contrary, the enemy deploys important forces at once and conducts the attack quickly, then the whole of the 1st regiment will be used up in trying to delay him, to make the fight last for a long time; the 2nd regiment will then have to take over the occupation of the second position.

If we make a calculation of time, certain results appear to be indisputable.

Thus the enemy column, the head of its advance guard having arrived at Bettwiller at 8.30, is already fired on by the guns on hill 353; it cannot advance further save under cover.

Starting to manœuvre, the enemy advance guard captures

Hill 353 (kleinmühle)
Hielling, } which it occupies;

as well as Bettwiller, where its reserve establishes itself.

From there it undertakes a reconnaissance which *discloses* an extensive front, with artillery; from there it will also cover the arriving and assembling column.

As a division in column takes about two hours to march past, its last element will not have arrived before 10.30. Until that moment, it remains assembled east of Bettwiller.

One may presume, therefore, that the line Petit-Rederching—Hill 353, even if weakly defended, will not be carried before 11.30.

The railway station will be carried at about 12.30.

If the enemy, while continuing to manœuvre with his right, advances on the road Petit-Rederching—Enchenberg (which will be made clear by his attacking the railway station and hill 356) the regiment in reserve (1st of the brigade) will deploy and occupy: Heiligenbronner-Wald, Heiligenbronn Farm, and the southern corner of the wood. The artillery is on hill 372, a position behind which the 2nd regiment assembles (for instance, south of hill 372).

The distance, however, between Bettwiller and that position is three and a half miles; once the enemy has deployed, he must spend more than two hours in covering it. The attack before Heiligenbronn can only take place after 1 p.m.; by that time the army corps has gone beyond Enchenberg; the flank guard may give way and withdraw on Siersthal.

If the enemy, after carrying Petit-Rederching and hill 353, undertakes to attack Halbach, instead of continuing his movement by the road to Petit-Rederching, he will fall into an angle of woods in which he cannot utilise his numerical superiority; his march is necessarily delayed by the broken nature of the region. The 1st regiment reinforces that point, sends there about one battalion, and itself proceeds to the east of hill 377, passing through Siersthal, where it leaves a garrison. Artillery comes up to the east of hill 377.

In that place, the action may last for a very long time.

As night falls the brigade may withdraw towards the brick-field, hill 416 and Fremdenberg Farm.

Such a detailed instance clearly shows how the flank guards of large units should operate: their tactics consist in constantly manœuvring in order to proceed from one road to the other, in order to fight while retreating, etc.; such *mobile troops* aim at occupying *fixed points* and utilise such points once occupied. This is what must be understood by the term: *fixed flank guards.*

The woody region we found here favoured the *direct* defence of the roads by which the enemy was coming. Under less advantageous conditions, on open ground,

he might, by making a demonstration on one road, seize the other one and forestall us there, without dividing his forces.

He must be held up all the same; the defensive being in this case no longer possible, the only way out would be to attack.

The case would be similar if the enemy, marching by night, had reached either Rohrbach, for instance, or Petit-Rederching, before the flank guard arrived there. How should he be held in that case? By attack.

This shows that a mission of protection does not necessarily imply a defensive attitude; it will be often better performed by an offensive. A mission to be performed and the tactics it may use are two perfectly different things. The tactics to be resorted to must be deduced from the examination of the goal and of surrounding circumstances.

An historical instance will demonstrate this clearly, namely, that of the Kettler brigade before Garibaldi's army. (See Sketch No. 4.)

In the evening of January 20th, 1871, the Southern German Army had reached:

Second Corps—	*Advance guard* .	Dôle;
	Main body . .	Gray;
	Supply columns .	Thil-Châtel.

The Seventh Corps, more to the north, had crossed the Saône.

A flank guard (half of the 4th division) was at Essertenne.

The same day (January 20th) the Kettler brigade of the Second Army Corps arrived at Turcey and Saint-Seine. It had previously been kept in the rear in order to cover the railway, Chaumont—Chatillon—Montbard, which fed the Second Army, and also in order to cover the march of the supply columns of the Second Corps. While at Saint-Seine—l'Abbaye, the Officer Commanding received the order to seize Dijon or rather to immobilize the French forces at Dijon.

What was this problem of Dijon which a brigade of 4000 rifles and two batteries had to solve? At Dijon, the army of the Vosges under Garibaldi had been joined

by the Pelissier Division. The whole number came to from 30,000 to 50,000 men.

These numbers were considered very doubtful at German general headquarters, owing to the complete inactivity of those troops, which had not only failed to impede the march of the Southern Army across the Langres plateau, but had allowed the heads of the German columns to seize the bridges on the Saône without having to fight for them seriously. In spite of this, information had reached German general headquarters, on January 18th and 19th, that some siege artillery and important reinforcements had arrived in Dijon, thus providing Garibaldi with new means of action which enabled him to impede the deployment of the Southern Army as it debouched from the Côte d'Or, as well as to hamper all the offensive manœuvres which that army intended to undertake in the Saône Valley.

While maintaining his plan of acting with all his forces against the *main enemy army*, that of General Bourbaki, General von Manteuffel was therefore under the obligation of *guarding* himself against a concentration of the importance of that at Dijon, and to provide against a possible attack.

He did so on the 20th by keeping half the 4th division in flank guard at Essertenne; in order to recover later the free use of that force, he entrusted that task after the 21st to the Kettler brigade, which had been sent to that end to Saint-Seine and Turcey.

That brigade lacked the following units: two companies left at Montbard, to guard the railway; one battalion and one squadron which, after escorting the supply columns of the Second Corps in the Côte d'Or, found themselves at Is-sur-Tille on January 20th.

The troops available in that brigade at that date are then:

At Is-sur-Tille, the Conta detachment	1 squadron 1 battalion (of the 61st)
At Saint-Seine l'Abbaye, the Kettler detachment	$\frac{1}{4}$ squadron $1\frac{1}{2}$ battalion (21st) 1 battalion (61st) 2 batteries
At Turcey, the Kroseck detachment	$\frac{3}{4}$ squadron 1 battalion (21st) 1 battalion (61st)

What happened at Dijon?

Garibaldi had allowed the Southern Army to cross the Langres plateau without trying to impede it.

On the 19th, while that army crossed the Saône, he set the army of the Vosges in movement, leaving General Pelissier the charge of holding Dijon. He brought his troops, in three columns, to four miles north of Dijon, and halted on a hill near Messigny, wherefrom he saw the flank guard of the German Second Corps (half the 4th division) marching past. If he had only pushed on as far as Thil-Châtel, he would have met the rear of the column of the Second Army Corps.

Even on the 20th, he might still have managed to prevent the supply column of that army corps from passing. Instead of acting, he confined himself to stationing his forces around Dijon again.

In acting thus, he left open not only all the roads of the Côte d'Or, but also the crossing of the Saône.

As for Dijon, the town had been fortified, but the Germans had only vague information of it.

Talant and Fontaine-les-Dijon had been strongly organised and armed with heavy guns. Several 12 cm. guns command the road to Saint-Seine and the road to Langres. The villages of La Filotte, St. Martin, and La Boudronnée had been defensively organised in the same way and connected with each other. The village of St. Apollinaire, on the road to Gray, had been joined up with the works on the southern face undertaken by the Germans and resumed by the French. In order to defend these positions, the Government of National Defence had organised the Pelissier Division; they intended using the army of the Vosges in field operations. Unfortunately that army was still at Dijon and little inclined to leave it. In any case, it was against the possibility of an attack from such a quarter that General von Manteuffel guarded himself when ordering General von Kettler to march on Dijon.

How will the latter fulfil his mission, namely, to immobilise the army of the Vosges at Dijon, or at any rate to prevent it from interfering with the events which are about to take place first on the Saône and later on the Ognon?

He must *as soon as possible* lay hands on the enemy, and therefore *attack* him. There is no time left for

effecting a junction between the divided parts of his command. From Is-sur-Tille to Turcey the distance is nearly twenty-four miles; it is still a twelve-mile march if the space is divided between the two bodies, each marching to meet the other; this means one whole day lost. The only thing to do is to march on the enemy, and to march as quickly as possible. He is not seeking some glorious decision. Such a decision will be secured on the Ognon. He merely wants to *immobilise* the adversary.

We see then, on the morning of the 21st, three columns the total of which does not include more than :

$5\frac{1}{4}$ battalions;
2 squadrons;
2 batteries;

marching on Dijon, namely :

Centre :	from Saint-Seine on Dijon, Kettler column	$\frac{1}{4}$ squadron, $2\frac{1}{2}$ battalions 2 batteries
Right :	from Turcey on Dijon, Major Kroseck	$\frac{3}{4}$ squadron 2 battalions.
Left :	from Is-sur-Tille on Dijon, Major Conta	1 squadron 1 battalion.

The central column encounters some French partisans on leaving Saint-Seine, and further at the Val-Suzon; it arrives at 1.30 at Changey Farm, where it is received by artillery fire from Talant and Fontaine.

The 1st battalion occupies the heights right and left of the road; the two batteries, thus protected, establish themselves on hill 390. Daix is attacked, and easily taken and occupied.

Here we have an advance guard going into action, its task being to prepare for the main body doing the same, and having therefore :

(1) To reconnoitre the enemy;

(2) To protect the preparatory moves made by the main body (arriving, assembling, deploying);

(3) To lay hands on the adversary.

The reconnaissance, here, has been already effected. The enemy has shown his masses on the slopes of Talant and Fontaine. The two latter operations remain to be done. In order to protect, on a large front and with small numbers, " points d'appui " must be found, that

is, points where one may *last*, where want of numbers may be compensated for by the value of the obstacle or by efficiency of fire. Such are, here, Daix, and the two spurs on either side of the road. Once the commanding and supporting points have been occupied by the infantry advance guard, the occupation will be reinforced by the advance guard's artillery. The battery which follows the advance guard takes up its position.

The third operation—namely to lay hands on the adversary—consisted in immobilising the enemy by threatening to attack; the available infantry was scarce, the ground in front was well under fire from enemy guns; therefore infantry was little used, while artillery was resorted to because it is capable of holding out as long as it is supplied with ammunition. Moreover, the Prussian field-piece was superior to the French gun: that superiority was utilised; the battery of the main body came up and reinforced the artillery of the advance guard. The main body of the infantry did not come under fire. The French, in the meantime, seeing the cautious attitude of their opponents, started attacking (at 4 o'clock) on Daix. They failed. They tried to manœuvre and to attack Daix in flank. The strength of that point rendered all their efforts useless.

The Kroseck column (right) only arrived at that moment, though it had met with no difficulty on the way. It carried Plombières. Connection was established with it. General von Kettler then decided to attack. What was he going to attack? One point: Talant. Why that point rather than another? Because it is on this that he can act with most forces; because the slopes of that valley provide, more especially for Major Kroseck's troops, relatively covered approaches. The attack is prepared by the fire of the two available batteries. The Kroseck column (two battalions) and one battalion of the central column are hurled on Talant.

The attack conquers the whole ground up to the foot of Talant; it fails before the village. It is 6 o'clock, darkness has fallen. The attacking forces are compelled to stop. But in order to emphasise a success *which has not been secured*, in order to immobilise the adversary, the latter is now held under the threat of a constantly impending attack; General von Kettler orders the

attacking troops to spend the night at the foot of Talant, a few hundred yards from the position.

All this took place on January 21st. It was very cold.

No connection had been established with the detachment from Is-sur-Tille; it was imperative to guard the column in that direction against the enemy's undertakings: one battalion was detached to Hauteville. The remainder of the column stood to arms in front of the enemy.

As for the column from Is-sur-Tille, it had not managed to carry Vantoux, nor to get itself in communication with General Kettler. It was threatened from all sides. It withdrew to Savigny-le-Sec.

In spite of the pluck which had been the dominant feature of the undertaking, in spite of all the energy displayed during its execution, the day had been only partly successful.

The attack on Talant had been a costly affair: the brigade had lost 19 officers and 322 men.

The 61st regiment, which had borne most of those casualties, still keeps in its records that old Burgundian saying: "*Qui voit Talant, n'est pas dedans.*"

Night in the open finished the brigade. There was neither wood nor fodder. The only food available was some bread, biscuit and bacon. It began to snow towards the end of the night. General von Kettler bivouacked near Changey Farm; the building was thronged with wounded; the general spent the night on the road, protected only by his two horses from the wind that blew across the plateau.

The enemy had displayed considerable forces, they had resisted everywhere. The enemy would claim a victory, that was certain, but let them obtain another victory of that kind and it would be for them the beginning of final disaster. The end aimed at by the Kettler brigade would have been reached.

Moreover, the effect of the fight had already been felt at Dijon. Fearing another attack, the City Council came and asked that the town should be spared the hardships of a bombardment.

In any case, the Kettler brigade was the following day in a state which compelled it to take some rest in order to refresh itself, to feed the men, a thing which was

becoming difficult in a poor country looted by the Garibaldians.

The general had also to try and save from destruction, or at least from isolation, the Conta detachment. Finally, ammunition was beginning to run low. An ammunition section was sent for.

The brigade, therefore, is resting on the 22nd. But food is lacking everywhere. The French try without result to attack Plombières.[1]

On the 23rd, General von Kettler decides, in order to find some wealthier or less ruined villages, to proceed with his brigade, by a movement in flank, from the hills down into the plain.

The movement is made from Hauteville via Ahuy on Valmy Farm; the brigade is assembled at 11.30 a.m. after joining the Conta column. News arrives that:

(1) Bellefond and Ruffey, occupied by the enemy the day before, have been evacuated;

(2) The whole flanking movement of that morning has been in no way impeded by the enemy, in spite of the short distance at which it has been made;

(3) Peasants and prisoners say, beside, that many troops have started for Auxonne.

General von Kettler does not waver. His brigade is in a very poor state; the position at Dijon is of the strongest. There has been a first failure; he may expect a second one, but no wavering is possible. The enemy manœuvres, threatens to disappear; he must be *detained* and therefore *attacked. He will be attacked.* In order to attack, the first thing is to have a *clear view* of the situation, to know *where* the enemy is and what he is *holding;* to determine what point must be attacked by the main body; for it is important not to rush blindly on that main body no matter *how* and *where.*

[1] Plombières is occupied by one section (small outpost) of German pioneers who have posted themselves at the eastern issue of the village. That section is soon very seriously threatened by the French, who march at the same time on the southern issue. The lieutenant decides to withdraw his section to the rear. That retreating movement is made very difficult by the hail of bullets sweeping the main street of the village. The lieutenant does not hesitate. He compels the inhabitants to leave their houses, and makes of them a living barricade in front of which the French cease firing, and under the shelter of which the Prussian section escapes. Is not this a purely objective solution of the question: security before everything? Let the reader meditate this.

That reconnoitring mission is the main task of the advance guard, and has always to be fulfilled with a minimum of forces. One battalion of the 21st is ordered at 1.30 to clear the heights north of Pouilly of the bands of partisans posted there. Those bands are successfully driven back. The assembled brigade advances behind. At the same time, the cavalry patrols which surround and protect the flanks of the advance guard report that considerable enemy forces are rallying from Varois and Saint Apollinaire and marching in the direction of Ruffey.

The scouting parties, which up to then had adequately covered the flanks of the attack, are no longer capable of holding up the coming enemy. A resistance, sufficiently serious to be able to last, has to be organised: one battalion and a half and one squadron are sent to Epirey.

While Epirey is being occupied, one company of the main body is sent to Ruffey. While action is prepared, protection is organised; such is the constant preoccupation of a commander: the attack, once launched, must not be *surprised;* it must have the time to *carry out its purpose*, or, at least, to *turn round*, and this under favourable conditions. That security service, covering the attacking body, is the advance guards' second task. What does the advance guard do to fulfil this second mission? It holds the "points d'appui," the occupation of which will protect the main body from the enemy attacks; it thus makes it easier for that main body to go into action. Such points are here: Ruffey, Epirey, and Pouilly.

It is soon found that the enemy does not undertake anything serious in the direction of Epirey. The battalion which occupies that village is therefore recalled, two companies only are left there, in order to do what has to be done with a minimum of force.

Meanwhile, the battalion marching directly on Pouilly makes substantial progress; that village is now about to be attacked. In order to be sure of succeeding, the battalion coming from Epirey is made to take a part in that operation. Of course, the attack on Pouilly is prepared by artillery—namely, the two batteries of the brigade which advance to short range from that place.

Here we see a full application of the principle of economy of forces.

In order to reconnoitre Pouilly, troops go into action in that direction. The enemy is reported to be near Varois and St. Apollinaire; security is ensured by occupying Epirey. The Epirey affair being settled, the attack on Pouilly is then proceeded with, but not before. This enables the commanding officer, by keeping one battalion which will move from one point to the other, to have:

Six companies at Epirey, in case the enemy should attack;

Eight companies at Pouilly, when that place comes to be attacked.

Here comes in again the art of always and before all securing *numbers* by manœuvring; this must be done without giving up anything, by laying hands on the "points d'appui," the strength of which will enable the small occupying numbers to fulfil their mission and to hold on.

The same applies to attacking: it must be conducted as far as possible not against a line or a front, but against one point; I may add, against a point which ought to be not one taken at random, but in general a salient or a wing, because the attacking force may in that case make the most advantageous, that is the most complete, use of the numerical superiority, of the numbers, it possesses.

By acting in this way, it encircles its adversary. Being more extensive than the line enveloped, the enveloping line can deploy more rifles, more guns than the adversary. On such an extensive enveloping line, the attacking force discovers, moreover, the space and the ground for approach, for manœuvre under cover, and finally for hurling its mass forward.

It thus secures the means of utilising in a superior way the two arguments it is using: fire and shock.

Once one point of the resisting line has been carried, that line falls easily.

Under the pressure of the two battalions, which have been preceded by a powerful fire and which have been able to manœuvre and to advance under cover, because they had a large space of ground at their disposal, Pouilly is taken, in spite of the somewhat vigorous resistance of the château.

The *main line of resistance*, behind Pouilly, consists:

first in the *factory*, a large square building, with a yard enclosed by walls;

Next in *La Filotte* and *St. Martin*, both of which are fortified, surrounded by deep trenches connected with each other and occupied by important forces.

The battalions which have carried Pouilly and the two brigades' batteries which have followed the attacking force until about 400 yards from the outskirts of the village, now attempt to debouch from that place. They are immediately held up by French artillery which has reappeared east of the road to Langres.

General von Kettler orders two battalions of the main body to advance. The advance guard does not suffice any longer, the main body must be resorted to. The advance guard has been exhausted by the effort made; a new undertaking is now beginning, for which fresh troops are required.

As for the troops which have just attacked, they assemble, reorganise themselves, pass back to the main body. Part of them begin, however, by ensuring the occupation of Pouilly, a starting-point for another attack. Thus the attack will proceed. Any progress achieved is made final by effectively laying hands on the point carried, by protecting it from any further dispute, by making possession definitely safe.

The attack progresses step by step from result to result, casting anchor from time to time as it advances over a sea fruitful in surprises.

They now attack the factory.

One battalion of the 61st deploys between the Val-Suzon and the road;

One other of the same regiment follows the valley itself. The latter drives back the enemy parties established between La Filotte and the factory; it protects itself with one platoon against Fontaine.

It has two companies in first line. The company on the left utilises the railway-cutting. Both reach in the end the sand quarry, 200 yards north-west of the factory. Further advance is rendered impossible by the fire from the factory and from St. Martin.

Both companies then establish themselves face to St. Martin. Another company is sent for from the second line.

The factory is again attacked: another failure; for

the factory is closed from all sides and artillery has not been able to prepare the attack: night has fallen, the attack has failed after enormous losses, leaving a flag in the hands of the adversary.

They decide to retreat. The second battalion, which has carried out the attack through the valley and the units of which are mixed up and astray, extricates itself with difficulty.

However, in order to keep the enemy in position, the brigade assembles *south of Pouilly;* it remains there until 8 p.m. At that moment, it withdraws on Vantoux and Asnières. It has lost a further 16 officers and 362 men.

By disclosing the occupation of Talant and Fontaine and the serious resistance of the enemy, the fight had shown that the French still had, in the evening of the 23rd, all their forces in Dijon and its neighbourhood. The result desired had been attained by that date. On the following days, General von Kettler remained before, and at a short distance from, Dijon.

Many tactical lessons might be drawn from these fights around Dijon. In connection with what interests us more especially in the present study, namely, *security*, they show well by what kind of offensive tactics the Kettler brigade had to fulfil its protective mission. We have seen up to what point the commanding officer carried out his mission.

The result, as is well known, was the great success of the Southern German Army.

As for Garibaldi, the repeated attacks of January 21st and 23rd induced him to believe that he had before him important German forces. He remained on a cautious defensive: he praised his own successes in the most eulogistic terms.

The result was the disastrous defeat of the Eastern French Army.

Error is human, we may be told; it is not a crime.

The crime does not lie in that, but in the fact that Garibaldi, after being ordered to join the Eastern Army, had not done so. He never thought of carrying out his orders. His conduct was dictated by his own personal views, by his craving for personal success.

No material impossibility prevented him from obeying,

had he attempted to do so: the Pelissier Division remaining at Dijon would have sufficed to absorb General von Kettler's activity; the army of the Vosges might freely have joined the Eastern Army.

Garibaldi and General de Failly, although their military origins were very different, reached the same result, disaster, by following the same ways: *mental indiscipline*, *neglect of military duty*, in the strictest sense of the term.

In either case no difficulty whatever prevented them from performing that duty; but they would have had first to perceive that duty; they needed a sense of discipline. The error, the crime, might have been avoided; the disaster prevented; everything obtained—simply by acting according to orders.

There is still another lesson of a higher nature to be drawn from this study:

In a time such as ours when people believe they can do without an ideal, cast away what they call abstract ideas, live on realism, rationalism, positivism, reduce everything to knowledge or to the use of more or less ingenious and casual devices—let us acknowledge it here—in such a time there is only one means of avoiding error, crime, disaster, of determining the conduct to be followed on a given occasion—but a safe means it is, and a fruitful one: this is the exclusive *devotion* to two abstract notions in the field of ethics: *duty* and *discipline;* such a devotion, if it is to lead to happy results, further implies besides, as the example of General von Kettler shows us: *knowledge* and *reasoning*.

CHAPTER VI

THE ADVANCE GUARD

When our brigade in flank guard halted, on the evening of August 4th, at Woelfling, in order to cover the army corps billeted at Kalhausen, Achen, Etting, etc., it covered itself with a number of outposts. At what object did it aim in sending out these outposts? It aimed at the power of resting sheltered from the enemy's attack. To this end, the outposts were expected to act as follows :

If the enemy came on, to keep him at a distance.

If he attacked in force, to hold him, even then, for such time as would be needed by the brigade to evacuate conveniently such billets as should have become unsafe and to prepare for action.

To be able to rest, and to leave billets under shelter from possible enemy blows, this is the very meaning of the word *security ;* such a *material security* is indispensable to any force if it proposes to rest, to maintain its strength, to keep its spirit and its confidence in its commanders.

Now what did the army corps ask of the brigade?

During the night from the 4th to the 5th and during the day of the 5th, the brigade was expected :

(1) To shelter from enemy blows the army corps, whether billeted or marching, and, obviously, to ensure *material security.*

(2) But it was also expected, should the enemy come on, to hold him for such a length of time and at such a distance as would enable the army corps to continue its march on Bitche, in order to act in compliance with orders received : that is, the brigade must afford the corps *tactical security.*

That notion of security, which we express by means of a single word, divides itself, then, into :

(1) *Material security*, which makes it possible to avoid enemy blows when one does not desire to strike back or cannot do so; this is the means of *feeling secure* in the midst of danger, of halting and marching under shelter.

(2) *Tactical security*, which makes it possible to go on carrying out a programme, an order received, in spite of chance unfavourable circumstances produced by war; in spite of the unknown, of measures taken by the enemy of his own free-will; also to act *securely and with certainty, whatever the enemy may do*, by safeguarding *one's own freedom of action.*

Material surprise means losing material security; we have, in case of such surprise, the enemy freely firing into our billets, our bivouacs, or our marching columns.

Tactical surprise means endangering tactical security, losing freedom of action. This would have been the case with the Fifth Corps in 1870, more especially with the Lespart division, had the enemy come on during the days of the 5th or 6th of August. The marching forces would have had to risk a battle on the very road they were following. Instead of continuing their movement, they would have had to fight; they would never have arrived.

The same army corps was materially and tactically surprised at Beaumont, on August 30th.

Materially: because, for lack of outposts, the enemy could fire without difficulty on troops at their bivouac, then busy assembling, and therefore unable to return the fire.

Tactically: because, for want of the organisation of a system of cover at a distance, that corps had to fight on the road it had to follow; it had to give up marching towards the Meuse, which it had been ordered to cross.

This argument shows what must be understood by the word *security*. Security implies the possibility of carrying out securely, safely, or rather surely, numerous and distinct schemes, each of which must have been well defined beforehand in every particular case, so that the service of security, which is connected with those schemes, should completely fulfil its purpose.

From what we have already seen may be deduced a number of corollaries:

(1) The organ which guarantees the tactical security of a large unit (of an army corps in the case under consideration) is the advance guard, meaning by this general term a detachment placed on the flank, in front or in the rear of the main body; such a detachment to utilise in any case its own resisting power for the benefit of the main body, in order to enable that body to carry out the operation prescribed and to comply with the orders received. Further, as that operation, those orders, are constantly changing, it may be at once concluded that the manner of acting of the advance guard, the tactics it will have to resort to, will have to be determined in each particular case by the nature of the operation to be protected as well as by the circumstances (time, space, ground) surrounding the advance guard as it moves on.

(2) The advance guard protects itself with its own material service of security (the outposts), which, after having been more or less reinforced by troops detached from the main body (occupying Singling, in the instance given above), will then be sufficient to guarantee the material security of the army corps.

(3) In any case, and whatever the situation considered may be, we have seen, in the case of Rohrbach, that *security* is based on two elements, two mathematical quantities: *time* and *space;* also that it contains a third element: the *resisting power* of the troops.

In the case considered, the advance guard had to provide the marching army corps, for the whole time its march was taking place, with a *zone of at least 3000 yards*, which should be proof against the enemy along the whole length of the column or rather during the time the column was marching past a certain point, that is, in this case, for four hours. Such was the problem of security it had to solve for the benefit of the army corps.

Now, the officer commanding that advance guard needed a certain *time* in order to think, to give out orders, to have those orders transmitted and carried out; he needed also a certain *space* in order to bring his troops to such and such road junctions before the enemy should arrive; in order to deploy them, to send them into action, and to manœuvre to the rear if he were thrown back. Another problem of security had

therefore to be solved in order to ensure the working of the advance guard's main body.

In the one case as in the other, once these conditions of time and space had been ensured by the troops detailed for security, that is, by the advance guard, the problem would be solved.[1]

(4) Whatever the hypothesis, so far as *space* is concerned, the following principle is both absolute and elementary: a force must always be master of the ground surrounding it up to the extreme range of its arms, if it wishes to avoid being outflanked, enveloped, encircled, exposed to the havoc wrought by modern arms, destroyed before being able to fight. That space which ought to be protected from the blows and observations of the enemy is what we call the *zone of manœuvre*.

In any case, the kind of security we have hitherto considered—a security ensuring that freedom of action which we must keep in order to carry out the orders given us and to go where we have been told to go—only enabled us to shun the enemy. The theory of war admits, however, of only one argument: *battle*. The enemy must be beaten, otherwise nothing is done. Let us, then, consider now how forces ought to be used in view of the battle and during the course of the battle. Must security be considered here also? And, if so, what

[1] Using mathematical language, we might say: security S, necessary to a main body, involves a certain time T, a certain distance D; it is ensured by the resisting power P of the security-force, which possesses a well-determined numerical strength:

$$S = f(T, D, P).$$

In this equation, time T and distance D being definite data, the officer commanding the security-force has no other variable at his disposal than the resisting power P of his troops.

He must, then, naturally tend to increase P.

In order to do this, he applies the principle of the economy of forces; he organises his troops into a system of forces.

He still further increases P (resisting power or faculty of holding out against the enemy), without allowing himself to be destroyed, by lengthening the distance along which his troops may manœuvre while retreating. Therefore, the weaker the force which has to provide for security S, the *longer* must be the distance by which it gives cover and so fulfils its protective mission, thus compensating inadequacy of numbers by a greater facility for manœuvring to the rear.

To achieve security, on a given day, consists, then, in first setting up, at a distance to be determined more particularly by the means of resistance supplied by the ground, a protective system capable of lasting for a time T and of continuously guaranteeing a distance D.

function are we to expect of it? To what extent and how is security to provide that function? We have at the outset of our problem troops already assembled for battle; they are not forces still to be grouped, they are forces ready to be applied. The hammer is constructed: our business is to strike. True enough; but the hammer is not yet *in hand.* Our mass constantly loses its form of assembly in order to march forward, and marching is necessary up to the last moment: the march of approach.

Besides, the *point to be struck* must be indicated to the mass, therefore it must be known. Such a point is not a casual one; it will be either a salient on the enemy line, or a wing, or a flank; therefore the point must be determined; we have first to seek it, then reach it.

For either of these two reasons, any action of our forces would be utterly uncertain that should be undertaken without first complying with two conditions:

(1) The objective to be struck must have been determined.

(2) The forces must have been taken in hand and arrayed in front of that objective.

So long as this has not been effectively done, freedom of action must be kept in its entirety, the troops must be protected from the adversary's undertakings, for they are not in a position to meet him successfully.

As soon as we enter the battle-field, then, at the moment of action, we are compelled to solve the same constant difficulties of warfare, namely:

To determine *where* and *how* we have to act, *where* and *how* we have to strike.

Once that question has been settled, we must keep the means and facility of striking even in presence of the enemy.

Security is therefore indispensable, for it alone provides: (*a*) the possibility of avoiding surprises, that is, of *feeling secure*; (*b*) the possibility of seeing clearly, of reaching the result in spite of the enemy, that is, of *acting securely.*

Let us return to our instance of the Fifth Corps, marching on August 6th, 1870.

Owing to the dispositions we have taken, it has managed to keep a good pace. The enemy has not shown himself on the road; there has been, in fact, no

difficulty whatever; but even if the enemy had shown himself, he would not have stopped the movement, he would not have prevented the column from continuing to march. As a matter of fact, the army corps has arrived on the battle-field in time. With the formation adopted, since the head of the column would have appeared in Reischoffen at 9 o'clock, the rear would have been there by 1 p.m.

Shall we now throw these forces into the thick of the battle as they arrive and, so to speak, drop by drop? Obviously not. This would mean squandering them without any serious effect. Let us recall, moreover, our principle of the economy of forces. We cannot be victorious everywhere: it will suffice for us if we are victorious on one point. We must fight everywhere else with a minimum of forces in order to be overwhelming on that point. We must economise everywhere else, in order to be able to spend, regardless of loss, on the point where we desire to secure a decision; the *mass* must be applied there, and therefore be *made* and *reserved* beforehand.

The Fifth Corps, which has hitherto been carefully spared, will have first to *mass itself, then to post itself, after gathering information, facing the point of attack; finally to deploy there;* it cannot do all this unless it is *covered*, for a force cannot mass itself, manœuvre, deploy, under enemy fire, any more than it could bivouac while receiving enemy blows; commonplace security consists in facing your enemy's blows only when you can hit back; art consists in then hitting back more vigorously than you have been hit yourself. The army corps will open the attack after deploying; but it will still have to *cover itself* on its threatened flank, in order to avoid being surprised, for surprise brings any attack to a sudden close.

As all preparations previous to attack must be made under shelter, there must be some protective force. That force is the advance guard.

It has already proved necessary, while the corps was marching, in order to remove obstacles on the road; the advance guard again proves necessary when going into action.

Another remark must be made so far as Froeschwiller is concerned: the Fifth Corps, on its arrival, found a

known situation, a position already held. The enemy had shown his forces, his gambit, his intentions; he was held up on certain points.

As you see, the advance guard of the Fifth Corps (the necessity of which has been shown), though its mission would still have been important, would have had here to fulfil only part of the task which generally devolves on an advance guard. As it came up to join the main body it would have found the battle already raging for a long time; at the moment it arrived on the ground, the situation would have been known, the enemy would have been reconnoitred.

Quite different would have been on that same day the task of any rationally organised advance guard of the First Corps. It would have had, early in the day :

(1) To inform the command of the adversary's movements.

(2) To cover the dispositions by which the officer commanding the First Corps intended to meet those movements.

Again, the task of the Douai division, advance guard at Wissemburg of the army of Alsace, would have been a quite different one two days before. It would have had :

(1) To reconnoitre the German forces entering Alsace.

(2) To cover the concentration of the French forces which had to fight them.

Its tactics ought therefore to have consisted :

(1) In engaging until the enemy should have displayed numbers superior to its own.

(2) In manœuvring afterwards to the rear, retreating on Reischoffen, in order to hold the enemy in that direction during the whole time necessary for the intended concentration of the main forces. Let us remember the case of Voltri !

We may deduce from what has just been said that to bring one's forces to the battle-field is not all; that such security as has enabled us, by safeguarding our *freedom of action*, to bring them there, has still to be completed by such security as will give us the *free disposal* of those forces now they have arrived, and enable us to employ them *where* we should, and *when* and *how* we desire. This new form of security must therefore :

(1) Supply information as to what point or points ought to be struck.

(2) Guarantee the possibility of bringing and deploying the main body face to face with the selected objectives.

(3) Cover the main body during all preparatory operations.

The *unknown* is the governing condition of war.

Everybody is familiar with this principle (so you might think), and being familiar with it will distrust the unknown and master it; the unknown will no longer exist.

This is not true in the least. All armies have lived and marched amidst the unknown.

It was from the *sous-préfet* of Wissembourg that Marshal de MacMahon heard of the approach of the Prussians at the beginning of August 1870. Until that moment he ignored their numbers, their points of concentration, and the whole measure of their preparation.

But the Third German Army, which was entering Alsace, knew no more.

On August 16th, 1870, on the 17th, on the 18th up to noon, German general headquarters were equally uninformed. These armies, it may be said, were badly commanded. But was not the same condition of ignorance constantly true of Napoleon's Army? Let us remember the days before Jena—more particularly the eve of that battle.

The best commanded armies have marched, have manœuvred, amidst the unknown. It was unavoidable. They have, however, got the better of that dangerous situation, they have come out of it victoriously, by resorting to security, which enabled them to live without suffering damage in an atmosphere full of dangers.

It was behind the advance guard (Fifth Corps) of Marshal Lannes, after it had come by mere chance upon von Hohenlohe's army on October 13th, that the whole French army came up and concentrated, and therefore found itself on the 14th in a favourable posture for battle.

Again, it was security which enabled General von Kettler to hold on with five thin battalions in front of Garibaldi's 50,000 men, without having to fear a surprise.

To return to our theory, how can we master that unavoidable unknown, how shall we manage to see through the thick fog which always surrounds the situations and actions of the enemy? By utilising the advance guard.

When one moves at night, without light, in one's own house, what does one do? Does one not (though it is a ground one knows well) extend one's arm in front of one so as to avoid knocking one's head against the wall? The extended arm is nothing but an advance guard.

The arm keeps its suppleness while it advances and only stiffens more or less when it meets an obstacle, in order to perform its duty without risk, to open a door, etc.; in the same way, the advance guard can advance and go into action without risking destruction, provided it uses suppleness and strength, manœuvring power, resisting power.

Moreover, the unknown disappeared in the past from the moment the battle-field was entered.

In Napoleon's time, fighting dispositions were taken at a very short distance, in presence of an enemy one could easily see, the power and situation of whom could be easily measured. Later, in proportion as the range and power of arms increased, distances increased too; troops had to look for shelter, to adopt a more and more dispersed order. Still, the smoke produced by powder enabled the general to reconnoitre, at least partly, the first dispositions of the enemy. The latter disclosed by his fire the positions he was occupying. Smokeless powder has changed the picture and made the unknown both *complete* and *lasting*. Going into action reminds one of a struggle between two blind men, between two adversaries who perpetually seek each other but cannot see. Shall our new method, then, consist in rushing straight on, or to the right, or to the left, at random? Shall we allow the enemy to throw his arms round our body, to grasp us completely, without our retaining the possibility of first grasping him ourselves, and of striking hard? Obviously not. In order to conquer that unknown which follows us until the very point of going into action, there is only one means, which consists in looking out until the last moment, even on the battle-field, for *information;* there is only one way: extending the arm before one,

utilising the advance guard, which keeps searching for, and supplying, information even on the battle-field.

To inform, and, therefore, to *reconnoitre*, this is the first and constant duty of the advance guard.

On what should it give information? On the *main body* of the enemy forces.

At Pouilly, the Kettler brigade found itself before parties of *francs-tireurs* who obscured the field of view; it was necessary to try and see beyond them. An advance guard was sent out. It scattered those parties, started reconnoitring, then attacked the village of Pouilly.

It found the main line of resistance of the enemy behind that place; its mission had then come to an end.

As a matter of fact, the enemy, with his reconnaissances, with his detachments of all kinds, is everywhere. Still, his main body is only to be found on one point, in a certain region. It is the main body we must *strike*, it is against the main body we must *guard ourselves*, it is the main body therefore on which we must have information. We must know where that main body actually is; therefore, we must break through the security service which obviously covers it. Our organ of information has therefore to be endowed with force, to possess a breaking power. But even this does not suffice; we must know *what* the main body is, *what it is worth*. The advance guard must, then, in order to compel the main body of the adversary to make itself known, oblige it to deploy, but that task presupposes attack, that is, full forces in artillery and infantry.

The reconnoitring mission of the advance guard must be pushed up to that point—full information on the main enemy body: that mission comes to an end when this first point, information about the enemy's main body, has been secured.

There is, however, another circumstance which impedes our manœuvre, namely, *dispersion*.

Troops arrive in a marching column, or even in several marching columns: it takes an army corps, thirteen or fourteen miles long, five or six hours to march past a given point or to make the rear come up with the head of the column; for these five or six hours, the army corps only disposes of part of its forces. Still the officer

commanding the army corps cannot think of pouring his forces drop by drop into action, even if he is aware of the *direction* to be taken; he must therefore first manage to assemble, then to deploy and array his troops facing their objective.

Under different circumstances, another mode of assembling has to be resorted to.

The army of Alsace in 1870 had to concentrate its First, Fifth, Seventh Corps before risking a battle; its advance guard, the Douai division, might enable it to do so.

It was the same case at Jena, at Montenotte.

In either case, the preparatory operation, which may last a long time, must be covered; otherwise it will be endangered. This implies security, which it is the business of the advance guard to supply. The latter must enable all the fighting troops to fall into line in spite of the enemy's presence.

To cover the forces, first while assembling, then while being put into action, such is the second mission devolving on the advance guard.

That mission implies, above all, the power of lasting out for a certain time; the advance guard must resist with weak forces on a wide front. How can this be done?

By means of an unassailable position, according to Carnot.

By manœuvring, provided the ground is wide enough.

A position allowing for this result is, in the modern sense of the word (as we have seen), one which provides a number of "points d'appui," and of points with an extensive observation and range making it possible to employ various kinds of fire.

The tactics of our advance guard should consist in making quickly for those points, in order to open fire at long-range and thus postpone the decision.

Thus the Kettler brigade arrives before Talant and throws its advance guard companies on the two spurs north and south of the road, then on Daix; by immediately taking up these defensive positions it protects the main column and the Turcy column (the main body of the forces) as they arrive, and occupies a position strong enough to be able to hold up, until further orders, with few troops (one battalion, two batteries, two

companies), an attack made by very superior forces (the several brigades of Garibaldi).

Thus, again, the advance guard of the Prussian Guard, on August 18th, moves rapidly on Saint-Ail, then attacks Ste Marie-aux-Chenes. So doing, it occupies and conquers a number of "points d'appui" which ensure the possession of the ground needed by the main body.

What is the ground so needed? What is the space necessary to the main body?

The ground on which to assemble and take one's forces in hand must obviously be protected; at the same time it is also necessary to prepare the *setting* of these forces into action. Therefore protection must at least extend, so far as the width of the front is concerned, over the space necessary for the main body to deploy. The ground to be occupied by any advance guard may therefore at a maximum be equal to that front of deployment.

A divisional advance guard consisting of one regiment may thus have to extend itself over 1500, 1800, 2000 yards, or even over the whole space needed by the division. The regiment can do so without risk, by utilising ground under the conditions described above.

This does not clash with the limits to a width of front as they are prescribed by the regulations. For the advance guard has not to *fight*, that is, to accomplish the act of force designed to upset the adversary; it has not therefore to take up any formation of combat.

Its aim is very different: it consists in reconnoitring the enemy, and holding against him only over a certain limited space, during a certain limited time.

When we come to study battle, we shall see what fronts ought to be given to the troops in order to attain the result desired, that is, the overthrow of the adversary. The result we aim at in our present study of the rôle of an advance guard is quite other, and it determines the means we should employ. The fronts of combat prescribed by regulation do not concern the deployment of an advance guard battalion, any more than they do the dispositions taken by that battalion when it is dispersed on outposts. (See on a later page the deployment of Marshal Lannes's advance guard at Saalfeld.)

The ground to be covered *in depth* may also be a large one.

The main body must in any case be provided with a *zone of manœuvre*, but it is also necessary to *hold safely* all the issues which the main body must utilise in order to deploy.

To hold these issues safely means enabling troops to perform under good cover the double operation of arrival and deployment. The advance guard must hold the keys of the avenues of approach whereby arrival is effected or debouching from which deployment is made. And these keys are:

(1) The "points d'appui" where an enemy marching on such avenues may be held up before he reaches them.

(2) The commanding points whence the adversary might act either by firing on those avenues, or on the deployment ground in front of them.

Thus the German advance guards of the Second Army establish themselves, on August 3rd, 1870, on the right bank of the Lauter, because the army behind them has to cross the river on the following day: this is tactical security.

Thus again the François brigade of the Kamecke division arrives at Sarrebruck on August 6th. The bridges are untouched, the brigade immediately seizes them. In this way it secures for the army corps the material means of crossing the Sarre. But this is still no more than *bare occupation; possession* must be secured, that is the power to *make use of* the bridges. The advance guard can only secure that power by seizing the heights on the left bank of the Sarre. Nothing can be done as long as one does not hold the heights; the advance guard marches on them; it so marched and reached them for the sake of obtaining tactical security.

But there remains a further point. So long as we have not beaten or at least attacked the enemy, he keeps his *freedom of action;* he remains free to alter his situation or to shun the manœuvre we are preparing against him.

The two first results attained by the advance guard:

The reconnoitring of the enemy:

The covering of our own forces,—these would not be of the slightest use to us if the advance guard did no more.

The reconnoitred enemy might at the last moment alter his dispositions, or, if need be, steal away. The manœuvre we had carefully prepared and covered would be void from the very moment we began to carry it out.

Let us recall the morning of August 6th, at Woerth. The French were no longer seen from the Prussian camp, as they had been the night before. A reconnaissance was ordered to find out whether things were in the same state as on the preceding day. That reconnaissance made it known that the French were still in force on the Sarre, but that they seemed to be retiring; movements of trains were heard at Niederbronn railway station which confirmed the idea of a retreat. The advance guard attacked. It is indeed of the highest importance that at the time of going into action the enemy should not be free to do what he likes and to avoid the shock which we have prepared.

The reconnaissance must therefore be followed by an attack, made by the advance guard with the object of fixing the adversary, more especially if, in the course of the reconnaissance, the enemy has been found to be manœuvring.

As a matter of fact, the retreat of the First French Corps on August 5th would have enabled it to join, before the battle, the Fifth and Seventh Corps; a junction which, as a fact, only took place much later, at the Camp de Chalons, after two of these army corps had been considerably reduced in numbers by fighting, while the third had largely lost its moral.

Again at Spickeren, on the same day: General von François, after carrying the heights on the left bank of the Sarre, attacked the Rotherberg, because he thought the enemy was *retreating*. He had to hold him, for you cannot strike an adversary who is stealing away from you, you cannot manœuvre against a moving enemy. You have first to nail him to the ground; then only will the manœuvre you have prepared serve its purpose; then only will that manœuvre be a rational one, and correspond to the enemy's actual situation.

You cannot strike with your fist an enemy who is running away in order to shun the blow. You must first take him by the collar to compel him to receive the blow.

Taking the enemy by the collar is the function of the advance guard.

Those three unavoidable conditions of war: the *unknown, dispersion, freedom of the enemy*, gave rise to the advance guard and determine its threefold task, which is:

(1) To *inform*, and therefore to *reconnoitre* up to the moment the main body goes into action.

(2) To *cover* the gathering of the main body and to *prepare* its entrance on the field.

(3) To *fix* the adversary one intends attacking.

These characteristic features of the advance guard must never be lost sight of when we take our dispositions. We have to give each the importance which attaches to it according to circumstances. That measure of importance attaching to each function cannot be determined here. It varies from one situation to the other.

The proper way of handling an advance guard naturally results from this threefold task:

I. There must be an *offensive*—

(1) In order to *reconnoitre;* that is, in order to peer through the service of security established on his side by the adversary, and to reach his main body and compel it to show itself.

(2) In order to *conquer* the ground necessary to the *protective* mission of the advance guard.

(3) In order to *conquer* the ground necessary to its own *preparatory* mission, as well as the space needed by the main body for going into action; room for approach, and room of deployment.

That offensive must, however, be methodically conducted.

II. Then there must be a *defensive*, after one has finished *scouting;* after one *holds* the ground necessary to the protection and preparation of the main body's action, and after one has nothing left to do but to keep it. Thus the advance guard of the Kettler brigade, once it had arrived and established itself on the heights east of Changey Farm at Daix, stood fast.

So regarded, the tactics of the advance guard make an appeal to the *resisting power* of a force, and to its ability to *last out*. They utilise to this end everything which may further these two distinct properties, positions,

" points d'appui," long-range fire, manœuvring to the rear, in retreat.

III. Lastly comes an *offensive* again, in order to immobilise an adversary who might otherwise get away or manœuvre.

How can these three tasks, it may be asked, be performed simultaneously, since they may require different means of execution? How can offensive and defensive be simultaneously resorted to? Attack must obviously come first, but one must always preserve the power to resort to an efficient defensive should the necessity arise.

While we make a methodical offensive with part of our forces, we should devote the rest to occupying and organising the " points d'appui " in the rear; we should, of course, be careful to advance that line of resistance in proportion as our offensive progresses.

This short analysis gives one a glimpse of the various shapes and aspects the combat of the advance guard can assume, according to the development and difficulties of each of the three problems that have to be solved, according also to the particular circumstances of time, space, site, and enemy in each case.

There is no one form, no one type of combat for the advance guard; there is no one formula summing it up as a whole.

The same applies to the *composition of the advance guard.*

This composition is determined by the threefold mission an advance guard has to fulfil:

In order to reconnoitre, you obviously need cavalry; but infantry and artillery are equally needed in order to overcome the first resistance of the enemy, to reach his main body, and to compel the latter to deploy.

In order to *cover* and to *last out*, firing troops, moreover troops firing at a long range, are, as we have seen, indispensable; they must be capable of resistance, of holding their ground strongly: hence the need of infantry and artillery.

In order to *fix* the enemy, the offensive must obviously be resorted to and must be carried far enough to threaten the adversary at close quarters, otherwise he may escape: the more need for infantry.

We conclude, therefore, that the advance guard must

be composed of all three arms, if it is to become that organ of information, of protection, and of preparation, which we desire.

To this advance guard of the three arms has been frequently opposed the theory of an advance guard of cavalry alone.

We have already seen that, even from the point of view of *intelligence*, that arm, if used alone, is insufficient. Its imperfection becomes still more obvious when the two other functions of an advance guard, (1) protection and preparation, (2) seizing the adversary, are taken into account.

Cavalry, which is essentially an arm of shock, of immediate decision, does not in the least fulfil the condition of tenacity we require.

Again, it guarantees *space* but imperfectly, because it *does not hold the ground ;* it does not *occupy the soil.*

Reinforced by artillery, it presents a greater force of action and resistance ; still, it finds it difficult to *conquer* and to *possess.*

Besides, even if only partially beaten, cavalry runs a great risk of losing its artillery. The latter cannot act efficiently unless it is guarded solidly by a force in fairly close touch with it. It has to be supported by infantry.

The advance guard, then, needs all three arms. As it acts independently, it must also be under a single commander.

This conception of the advance guard, which we have attempted to base on abstract reasoning, is one of the characteristic features of Napoleon's tactics. We shall see this later on.

Napoleon wrote :

" An army must be ready every day, every night and at every hour, to oppose all the resistance of which it is capable ; this requires that all the various divisions of the army be constantly in position to help, support, and mutually protect each other ; that, whenever troops are camping, halting or marching, they should adopt such advantageous dispositions as are required on the battle-field itself : namely, that the flanks be supported and that all missile weapons shall be available under the most favourable conditions. In order to comply with those conditions, it is necessary, when marching in

column, to provide advance guards and flanking parties who should scout ahead and to the right and to the left, far enough off on all sides to allow the main body to deploy and take up its position.

"The Austrian tacticians have constantly violated those principles, and have based their plans on uncertain reports, reports which, moreover, even if they had been true at the time of framing the plans, ceased to be true on the morrow or the day after the morrow; that is, at the moment when the plans had to be carried out."

Two things, therefore, were necessary in the Emperor's opinion:

(1) Troops must be constantly able to oppose to the enemy the whole power they are capable of; they must organise their forces with that object in every situation: even while marching or bivouacking or when billeted.

(2) It is necessary, at the moment of going into action and of framing a plan, to do it only after having received reports which are *certain* and *true* at that moment. It is therefore necessary to organise an intelligence service capable of supplying such reports.

How can those two necessary things be done?

I. "An army must be constantly ready to oppose all the resistance it is capable of."

Now, it is impossible to keep all the forces of an army, or even of an army corps, or even of a division, in a state which shall allow for the use of all its means, missile weapons and others, when the troops are halting; it is even less possible to do so when they are on the march. You cannot halt or march in combat formation. How can the necessity clearly pointed out by Napoleon be reconciled with the radical incompatibilities thus discovered in practice, if it be not through utilising that property in troops which is both original and fostered by training, namely, resisting power? It is this which enables a certain fraction, the advance guard, specially organised and arranged with that object, to receive the enemy and to hold him up during the time necessary for the main body to take up its combat formation.

Moreover, the whole effort which a force can and must exert in order to master the enemy cannot be produced in one single moment. The commander of an army corps who disposes of eight infantry regiments

will not send them into action all at once; even should they all be available, assembled and to hand. Unity of time does not mean unity of moment. When we come to studying the *battle*, the act of force, we shall see that this act of war divides itself into a series of operations, a succession of efforts tending:

(1) Some to enlighten the command.

(2) Others to absorb, to wear out, the enemy's activities.

(3) Others, again, to overthrow, by means of a violent shock, the balance between the pressure of the assailant and the resistance of the defender.

Any sound utilisation of forces, even should it aim at a complete *decision*, implies the notion of a progression, a succession in the act of consuming such forces. Those which have gone first into action must have produced their own effect before others can utilise that effect. Such a notion of succession, I say again, is not contrary to unity of time; some period must necessarily be set in order to allow troops and arms to produce the whole effect of which they are capable.

Thus, to quote but one instance, we shall see in the attack upon a place:

ARTILLERY:

(1) Silencing the enemy batteries which defend its approaches.

(2) Preparing the attack by firing on the objective so as to make it untenable.

(3) Following up the attack.

INFANTRY:

(1) Reconnoitring points occupied by the enemy.

(2) Investing the position, keeping it under a powerful fire.

(3) Assaulting the position.

All of which successive operations are necessary in order to achieve the best possible use of forces, and do not require till the last moment the simultaneous action of all these forces.

We now have discovered the combination of elements we require.

The solution of the problem results from:

(1) The fact that it is *impossible* to keep *all* troops constantly ready to fight.

(2) The fact that it *is sufficient* to keep, at first, only

part of our forces in a position to go immediately into action.

Those forces, be they marching or even in action, will have constantly to be divided into two parts:

The *main body* and the *advance guard;* an advance guard strong enough to meet the first requirements and guaranteeing for the main body the possibility of convenient approach, both in time and place, so as to exert all the power of which the force is capable.

II. Napoleon has, however, stated a second thing to be necessary; namely, that plans should be based on reports which should be *certain* and *true at the moment of going into action.* . . . "To this end," he says, "it is necessary to provide scouting advance guards, and scouts and flanking parties."

Independently from the task assigned above to the advance guard—constantly keeping the covered troop in a state of readiness for action—there is, then, a second task:

Reconnoitring the situation by means of:

(1) Certain *reports,* which must go beyond the external limit of the enemy's security service and bear on his main body.

(2) Reports *true up to the last moment,* a condition implying that the organ of intelligence, that is, the advance guard, should keep in touch with the enemy, once he has been reached, *until the very last hour.*

From this twofold necessity, that of always keeping troops in a state of readiness for fighting, and that of reconnoitring the situation in a certain and positive way until the moment when the plan is settled, results again the advance guard with its threefold mission:

To inform.

To protect.

To come up to, and keep in touch with, the enemy.

We might also say that the advance guard is necessary until the moment comes when the main body goes into action, that is, until the main body has actually deployed and begun to act upon the enemy.

We insist on this point because people willingly acknowledge, in practice, an advance guard to be necessary in front of a *marching* column; they are less prepared to acknowledge that necessity where an *assembled*

force is concerned; they deny it altogether concerning a *deployed* force.

This is as much as to say that any force, merely because it has assembled and deployed, has the right:

To pass from one surprise to another, to manœuvre in the midst of danger, to fall unexpectedly under that hail of deadly projectiles which modern infantry can pour out from a distance of 2000 yards, and artillery from 4000 yards; a fire which is bound to demoralise any formation (especially assemblies of troops). And all this will take place unless the danger has been previously ascertained by an advance guard, and unless that organ has been kept in being and at work up to the last moment.

It is also as much as to say that one may base one's plan of action on reports of an uncertain nature, or which, even had they been true at the moment of deployment, have ceased to be so at the moment of attack: that is, a long time after deployment, given the long distance at which deployment must nowadays be effected.

We therefore conclude a second time that, in front of *any troop* not in action, an advance guard (of changeable shape and use) is constantly necessary in the direction of the enemy; an advance guard which should always be ready to handle the enemy, to receive him if he comes on; again an advance guard which should never lose sight of the enemy, but should compel him to show what he is, what he wants; which should thus enable the commander to *avoid* fighting, if he does not intend fighting or has received orders contrary to that effect; which should enable him to *risk* a battle under favourable conditions, that is, after reflecting and conveniently distributing his troops with full knowledge of the case.

Which should guarantee the commander's *freedom of action*, his power to march, to go where he chooses, to assemble.

Which should, moreover, guarantee the *free use of all forces*, that is, the possibility of using them according to a plan based on well-ascertained facts, and in spite of the enemy.

When should the *plan* of action be made? At the moment when execution can begin and after receiving

the latest reports. Let us remember how Napoleon blamed Alvinzi:

"What ought Alvinzi to have done? To have marched in one single mass, not to have taken any dispositions for attacking the Joubert division, until the morning and after reconnoitring it. As a matter of principle, no detachment" (we should say to-day: "no deployment"), "should be made on the eve of an attack; for the state of affairs may change during the night, either owing to retreating movements on the part of the enemy, or owing to strong reinforcements coming up and enabling him to take the offensive and to turn our own premature dispositions into disaster."

CHAPTER VII

THE ADVANCE GUARD AT NACHOD

(See Sketch No. 5)

To what acts does this theoretical function of an advance guard, as defined above, actually lead in a specific case and under particular circumstances? We shall find an example in the battle of Nachod.

On June 22nd, 1866, an order reached the General Headquarters of the First and Second Prussian Armies, at Joerlitz and at Neisse, to enter Bohemia and aim at effecting a junction in the direction of Gitschin.

To the Second Army belong the First, Fifth, Sixth Corps and the Guard. The army commander took his dispositions in view of entering Bohemia on June 27th, by three roads leading to Trantenau, Eipel, and Nachod respectively. On June 28th the march was to be resumed beyond the Elbe via Arnau and Gradlitz.

The Fifth Corps (Steinmetz), on the left, was to operate by the Nachod road, upon which the Seventh Corps was to follow later on.

The First Corps, on the right, was to operate by the road to Trantenau, whilst the Guard was to advance, in the centre, by the Eipel road, ready to support either of the wings, according to circumstances.

In the afternoon of June 26th the Fifth Corps had:

Its *main body* assembled in bivouacs, west of Reinerz, astride the road leading to Nachod.

Its *advance guard* at Lewin—the head of that advance guard at Gellenau;

Its *reserves*, packs and convoys at Rückerts and beyond.

It was ready to undertake the invasion ordered for the 27th.

According to the time-table drawn up by the army commander, it had, on that day of the 27th, to reach

Nachod with its main body, Wysokow with its advance guard.

Conforming himself to the intentions of the high command, the army corps commander prescribed the advance guard to push on its outposts, during the evening of the 26th, as far as the Mettau, which forms the frontier. He had heard that an enemy army corps had arrived at Opocno and was spreading north of that town; that enemy columns were also assembling near Skalitz; that the Nachod pass was weakly held.

In consequence of these dispositions, the advance guard commander, General von Loewenfeld, arrived on the Mettau in the evening of the 26th, with the head of the advance guard; he found the bridges cut, the customs house and its approaches weakly held by some Austrian detachments; he easily got the better of the latter.

He then decided to extend his reconnaissance, to march on Nachod with his first troops and to occupy with his outposts the heights commanding that place west of the Mettau.

Meanwhile, the destroyed bridges on the Mettau at Schlaney had been repaired and enabled the head [1] of the Prussian advance guard to cross the river.

The Austrians had occupied Nachod with a weak detachment: a half-company of infantry, two squadrons of cuirassiers, and two guns. This detachment withdrew without offering any serious resistance, but it informed by telegraph General Benedeck, at Josephstadt, at 8.30 of what was happening.

A short time after, the head of the Prussian advance guard had occupied:

Nachod, with its two Jäger battalions which established outposts far ahead on the road to Skalitz;

The heights north and south of the road (in a line with Nachod) with both half-battalions of the 3rd and 37th, each guarding itself by a few posts;

The remainder of the head of the advance guard (2nd and 37th and both squadrons) was bivouacking somewhat in the rear on the road;

[1] Two companies of the 5th Jäger battalion; two battalions (2nd, 3rd) of the 37th; two squadrons of the 4th Dragoons; one battery of four.

The advance guard's main body[1] had proceeded as far as the Mettau and established itself, for the night, south of the road, in a line with Schlaney, the 1st battalion of the 37th at the bridge.

The Seventh Corps, on its part, had received on June 24th, while in bivouac by Koppernig, the order to place at the disposal of General Steinmetz, commanding the Fifth Army Corps, the 22nd Infantry brigade, two batteries, and the 8th Dragoons. This detachment, under General Hoffmann, did not, as a fact, join the Fifth Corps until the 28th; that is, on the battle-field itself. It did not take any part in the battle of the 27th, with the exception of the 8th Dragoons, which, by two forced marches, reached Reinerz bivouac in the night of the 26th–27th, and formed with the 1st Uhlans and a horse battery of the Fifth Corps a brigade under General von Wnück.

In the evening of June 26th, then, the Fifth Corps was distributed as follows:

Head of the advance guard at Nachod;

Main body of the advance guard on a line with Schlaney (one battalion, one squadron at the bridge);

Main body of the army corps assembled at Reinerz;

Reserves at Rückerts; packs and convoys further back;

Hoffmann detachment about to join the army corps.

On the Austrian side, as is well known, the Northern Army, after concentrating in Moravia under the protection of the fortified town of Olmütz, had been set in movement in the middle of June in order to proceed to Bohemia, towards the position Josephstadt—Miletin. In order to cover that movement, General Benedeck decided, on the night of the 26th–27th, to send, on June 27th, the Fifth and Tenth Corps towards the avenues of approach—Nachod and Trantenau.[2]

So far as the Sixth Corps was concerned, the commander-in-chief ordered it, on the night of the 26th–27th, "to start on the 27th from Opocno in direction of Skalitz, where the army corps shall take up a position, while sending an advance guard on to Nachod.

[1] 1st battalion of the 37th; three battalions of the 58th; two companies of the 5th Jäger battalion; three squadrons of the 4th Dragoons; one battery of four pieces; two companies of pioneers.

[2] See the detail and circumstances of that order on p. 169.

"This disposition is intended to cover the movement of concentration of the army that is taking place in the surroundings of Josephstadt."

What was the situation of the Sixth Corps when that order reached it? It was lying, on the 26th, north of Opocno in the following order:

Jonack brigade [1] with 1 regiment of Uhlans (the 10th) at Kronitz and Waly covered at	Ohnishowb y	1 Jäger battalion 1 squadron
	Spie by	1 battalion of the 20th Regiment. 6 platoons.
Hestweck brigade at Dobeuschkaau Perlitz covered at		Prowoz Domaschin
Rozenzweig brigade at		Bohuslavitz Pohor
Waldstatten brigade at		Mezritz Gross-Rohenitz
Artillery reserve (5 batteries) at		Prepich Ocelitz

General headquarters at Opocno.

On the evening of the 26th the Jonack and Hestweck brigades had scarcely settled down in their billets and inadequately covered themselves, when they received an alarm and took arms at the approach of some Prussian cavalry detachments, which had come out on requisition, and which had debouched by the Giesshübel road. It was already late when they returned to their posts.

The contrasting distribution on the ground of each of these two opposing army corps, Fifth Prussian and Sixth Austrian, shows better than any words could do how each side understood war, how each side made war.

On the Prussian side, we see:

An army corps assembled, astride of the road it is to follow, its reserves behind it on the same road; it is ready to *act* with all its means; its commander is with the troops, effectively commanding; here we have a true combination of a *force* and a *will*. Moreover, after Steinmetz shall have moved his army corps,

[1] Each Austrian brigade included, as is known: 1 Jäger battalion. 2 infantry regiments. 1 battery of 8 guns.

he will have effected a junction with the advance guard; he will be on the 27th, at 8 a.m., at Nachod.

An advance guard is already holding the road far ahead, on the Mettau, ensuring the tactical security of that corps, clearing the road for it; so deeply conscious of its mission that, as early as in the evening of the 26th, it has got up as far as Nachod.

Early on the 27th, a *flank guard* will be sent to Giesshübel in order to protect the movement. Giesshübel

lies in Austrian territory; by occupying it on August 26th, the offensive scheme which had just been framed would have been disclosed. It was none the less occupied in order to protect the movement of the army corps once that movement had begun.

Such dispositions clearly show what *sense of action* inspires to the highest degree the commander of the army corps and the commander of the advance guard. They are both securing, by means of that advance guard (preparation), of that flank guard (protection) the *possibility* of carrying out the single action which

will be undertaken with all forces well in hand and in the same direction.

Their idea is to act with everything on one point; they are free to do it, owing to security; they will attain a decision owing to the economy of forces which has been achieved in apportioning those forces throughout the column.

On the Austrian side:

The army corps has deployed on a front of more than six miles, which enables it to get housing, to live, and to march comfortably. It is a situation which does well enough so long as no enemy is present, but it little corresponds to the necessities of war. Besides, the army corps is distributed in five distinct elements: four brigades and an artillery reserve.

Suppose, then, the enemy (who in war is always the prime objective of all combinations) should disclose his presence, the Sixth Corps would not be in a position to act owing:

(1) In the first place, to its being scattered: it ought to be possible for the Austrian forces to join up, but no time is left for that; there is no service of security which might provide the two or three quiet hours required for concentration on the front of more than six miles which has been taken up.

(2) In the second place, to the parcelling out of troops. Instead of opposing an army corps obeying one will, a bundle of forces acting all in the same direction, we have four distinct brigades which will necessarily work each in a state of isolation, each on its own account. On the top of a dispersion of forces, we get a dispersion of effort.

The army corps commander is at Opocno, far away from his own troops. It was, of course, a place most convenient for working; for writing out orders. But the instrument which is to carry out these orders is far from his hand. It will either not carry them out at all, or carry them out badly.

The high command perceives only the subjective part of its task: securing the means of keeping and leading an army. It has completely lost sight of the object to which that army is devoted: *fighting*. Nothing is being prepared in order to undertake and carry on fighting under good conditions. The notion

of war, the sense of action, have disappeared; they have been replaced by mere staff work, though staffs have always been incapable of creating, of themselves alone, such a thing as *victory*.

In spite of all, in spite of this complete misappreciation of war, the Austrians were to have the luck at the beginning of the day of the 27th, to meet with particularly favourable circumstances. There are other things in war than principles; there is time, places, distances, ground, chance which cannot be mastered. The Austrians ended all the same in being beaten. You cannot violate principles with impunity; fortune tires out, mind soon vindicates its rights over matter and chance.

I say "favourable circumstances." If we consider the first hours of the day of the 27th, the Sixth Austrian Army Corps could quickly reach its objective, the road from Nachod to Skalitz, by marching on a wide front and using three of four roads of which one only, it is true, that on the right, was a highway. The length of the march would be from six to nine miles for the infantry brigades and eleven miles for the artillery reserve. Starting at 3 a.m., as had been ordered, the infantry might arrive by 7, artillery by 9 or 10 (in view of the bad state of the roads), provided no enemy should be met with on the way. A cavalry division was available for the protection of the march.

On the Prussian side, to reach Nachod, the main body of the army corps had to cover eleven or twelve miles, the reserves thirteen; and this on one *single road*, along an almost continuously narrow way.

They have, of course, an advance guard at Nachod, but it will have no more than its own unaided strength until 11 or noon. It may have to fight the Austrian army corps from as early as 7, under circumstances which would then become critical, both (1) for that advance guard, isolated for such a long time; and (2) for the army corps behind it, which has only one issue by which to debouch (Nachod), and is in danger of losing it. The task prescribed to each one of these two opposing army corps gave the Austrians an advantage.

The commander of the Fifth Prussian Corps could

only have one end in view: to open the outlet through the mountains, that is, to take and keep the keys of that outlet and then to deploy his corps in front of it, on the plateau of Wysokow and Wenzelsberg. This result, if the enemy did come on in order to oppose it, could only be obtained by a *strenuous offensive*. It was, however, very difficult indeed to organise an offensive, in view of the nature of the available ground.

The commander of the Sixth Austrian Corps could interpret his mission in one of two ways, as he had been urged either to *take up a position near Skalitz*, or, if the enemy would come on, to *attack with the utmost energy*. In both cases the result could be easily attained. Should he decide to take up a position near Skalitz, he would find near Kleny ground with extensive observation, allowing for the advantageous use of the three arms, as will be shown later on.

He could reach that position on the 27th without any material difficulty, owing to the short distances involved; and without any tactical difficulty, provided he took the most elementary precautions. For the Prussian enemy needed the whole day before he could bring up to Nachod a force equivalent to an army corps. Once that position should have been reached, the Austrian commander had the time to occupy and organise it in the evening of the 27th and the morning of the 28th. Still, in order to do this, he had first to set up a scheme and to try and carry it out.

Should he, on the contrary, resort to an offensive, he would dispose of ground favourable to manœuvring; he could array on that ground a whole army corps which would have freedom of movement, and which would find itself under excellent conditions for fighting forces echeloned along a long road with only one outlet (Nachod) whereby to debouch. Even so, in order to reach that result, it was necessary to envisage this offensive, to prepare it, and, the opportunity arising, to carry out its rational realisation.

A comparison between the times at which, by mere chance, the movements began, shows that even from that point of view fortune was markedly in favour of the Austrian commander.

No result could be secured, as we have seen, by the Prussian corps, until it should have taken firm posses-

sion of the plateau west of Nachod, a plateau marked by Wenzelsberg, Wysokow, and the heights of Nachod. Any enemy holding these points might obviously endanger everything : entrance on the battle-field, deployment of the army corps. But these indispensable " points d'appui " could only be reached by the Prussians from a distance of fourteen miles and a half.

As for the Austrians, if they did adopt the idea of an offensive with a view to throwing the Prussians back on to the road by which they came, Wenzelsberg and Wyzokow had to be taken as first objectives so as to be made the " points d'appui " and the starting-points for all their actions to that effect. If, on the contrary, they kept to carrying out the defensive plan which consisted in taking up a position near Kleny, while retaining the possibility of acting later on against the outlet of Nachod, it was still the possession of Wysokow and Wenzelsberg which they had above all to secure. These points were not more than seven and a half miles distant from both the Jonack and the Hestweck brigades, which could, besides, be supported without delay and might therefore exert themselves thoroughly without regard to losses.

It was seven and a half miles as against fourteen and a half. Had the Prussians and the Austrians set out at the same hour, the Austrians would, then, be fighting for three or four hours with an indisputable numerical superiority. But, as a matter of fact, the Prussian dispositions, taken for the 27th, were two hours behind the Austrian dispositions. The first (the Prussians) had orders to start at 5 a.m., the Austrians at 3. This meant a total handicap of five or six hours in favour of the Austrian brigades, an indisputable advantage they might well utilise against the Prussian corps. They would, during all that time, be faced by nothing but a weak advance guard at Nachod of six battalions and a half. Moreover, they had one cavalry division at their disposal.

Such were the exceptionally difficult circumstances (they could have been partly foreseen, this is why we are laying stress on them in the course of the present study) under which the Prussian general had to make his column debouch from a long road and deploy from its point of issue at Nachod.

The task of his advance guard would consist in protecting those operations. A very heavy task indeed, when we consider the *numerical superiority* the advance guard would have to contend against and the *length of time* during which it would have to resist.

How did the advance guard manage to achieve that task? This is what we shall now examine.

The Evening of June 26th at both General Headquarters

On the Prussian side, as we already know, the advance guard of General von Loewenfeld had proceeded on its own initiative from the Mettau to Nachod. This was, as we shall see by and by, a mistake, a rash act which Steinmetz ought not to have allowed; for it might endanger first the advance guard, then the movement of the army corps, which was a more serious thing.

Steinmetz also gave out his orders for the 27th. Those orders proceeded quite naturally from the idea which could already be perceived in the echeloning of the 26th. They ran as follows :

" The army corps will march on Nachod and advance further in a westerly direction. Everybody will leave cantonments and bivouacs at 5; three ammunition columns will follow the reserves without intervals; other ammunition columns, as well as the bridging companies, will follow as far as west of Reinerz, where they will await further orders.

" Baggage will be packed at Lewin; field hospitals at Lewin; convoys west of Rückerts.

" The Hoffmann detachment will send, in the evening of the 26th, the dragoon regiment (No. 8) to the army corps's main body, where they shall form, together with the horse battery from the artillery reserve and the 1st Uhlans, a brigade under General von Wnück. With the rest of his detachment, General Hoffmann will cover the left flank of the army corps, more particularly in the direction of Giesshübel, and will expect further orders at Lewin."

On the Austrian side, General Raming was already giving out orders in compliance with preceding instruc-

tions from General Benedeck (which ordered the Sixth Corps to proceed to Josephstadt) when at 1.30 a.m. he received a new order dated from Josephstadt, 8 p.m., ordering the march to Nachod.

As a matter of fact, they had heard at Austrian General Headquarters of the march of the First Prussian Corps during the 26th towards Trautenau; also of columns approaching Braunau; of a large mass assembling at Reinerz and Lewin, presumably to march the day after on Nachod. They had concluded from this intelligence that the Second Prussian Army would soon enter Bohemia.

Benedeck persisted in proceeding with his scheme of concentration on the Jaromer-Miletin position, without attempting to manœuvre against the Prussians when they should debouch from the mountains. He therefore gave the following orders at 8 p.m. :

" From the latest reports I have received, it appears that strong enemy detachments are advancing on Polie, Trautenau and Starkenbach. In consequence, I order as follows :

" *The Sixth Corps will leave Opocno on the 27th instant, at 3 a.m., and will take position at Skalitz.* An advance guard will be pushed ahead on Nachod. The 1st cavalry division will be placed under the commander of that corps. Cavalry will be careful to scout far ahead, by means of strong patrols in front and on the flanks of the columns.

" The Tenth Corps will start to-morrow, 27th instant, at 8 a.m. after the first meal. It will leave its heavy baggage near the fortress (Josephstadt) and will take up its position at Trautenau. An advance guard will be sent ahead. The 2nd Dragoon regiment will be attached to that corps. Cavalry detachments will maintain liaison between the Tenth Corps and the Sixth, placed on its right, and will cover the left flank towards Arnau and Hohenelbe. The brigade detached at Praussnitz-Kaile will join up with the corps when the latter shall be marching past.

" The Eighth Corps will proceed to-morrow to Tynist, in the neighbourhood of Josephstadt, and will occupy the position left by the Tenth Corps. The Third Corps will leave Koniggrätz to-morrow and will establish itself on the left of the Fourth Corps. An advanced brigade will

scout on the roads towards Jicin and Neu-Paka. The Second Corps and the 2nd light cavalry division will proceed, on the 27th instant, from Lenftenberg to Lolnitz, so as to arrive on the 28th via Opocno to Josephstadt, and will camp, in compliance with instructions previously received, at Neu-Plas and at Jasena respectively. The 2nd light cavalry division will relieve the posts established by the 1st reserve cavalry division at Opocno, Dochkabrus and Neustadt.

" The Fourth Corps will remain in its present position. It will detach one brigade between Arnau and Falgendorf (north-west of Neu-Paka) so as to protect the railway. The Third and Fourth Corps must protect the left flank of the army by means of cavalry patrols sent out far ahead. The 2nd reserve cavalry division will proceed on the 28th from Holitz to Josephstadt, and will camp on the heights of Smiritz, on the right bank of the Elbe. The 3rd reserve cavalry division will leave Wamberg on the 27th, arrive at Hobenbruck the same day, and the day after (28th) at a point abreast of Smiritz, on the bank of the Elbe, where it will camp.

" *The object of this distribution is to cover the concentration of the army near Josephstadt now being proceeded with. This must not prevent us from energetically marching on the enemy, should the opportunity arise, without, however, pursuing the enemy too far.*"

If we were to discuss that order, we would find in it the same features we have noticed in the arrangement of the Sixth Corps on the evening of the 26th. It lacks military spirit, and therefore military insight. We have here not an army working in order to act against the enemy with harmony and strength, but a great number of army corps, of cavalry divisions, moving on a given ground as if they were lifeless beings, pawns on a chessboard; nowhere (save at the end of the order) does the directing thought of the high command declare itself so as to make known the result which shall be not only defined and guaranteed but actually secured by the carrying out of that order. *The object of that distribution is to cover the concentration, now being proceeded with, of the army near Josephstadt.* Suppose, however, that the order thus minutely drawn up, cannot be fully carried out, owing to the enemy's actions—a dominant factor which obviously has to

be taken into account in war—what can then direct the performers? On the other hand, the arms and legs of all those performers have been carefully tied up by determining the means to be resorted to, by enumerating childish recommendations. Suppose the enemy comes on, suppose the prescribed means will not meet circumstances (and so it always happens), they must then either disobey or allow themselves to be beaten, two solutions which both lead to disaster.

That evil does not escape the attention of the commander-in-chief. He hopes to lessen it by adding in the end of his order :

"*This must not prevent us from energetically marching on the enemy, should the opportunity arise, without, however, pursuing the enemy too far.*"

This only makes things worse by wantonly throwing his subordinates' minds into uneasiness and confusion by telling them at one and the same time : "Go back and go ahead. Take position . . . and still march on." As if, in order to march energetically on the enemy, it were not necessary to look out for the enemy, to look out for opportunities ! The most disastrous consequences will result from this fashion of commanding. It will always be so whenever the commander-in-chief, being unequal to his own task owing to a deficiency in clear-sightedness or will, tries to take the place of his subordinates, to think and decide for them; in order to think straight and to decide rightly, it would be necessary for him to see through their eyes, to look at things from the place in which they actually stand, to be everywhere at the same moment.

To command, in the sense implied by the extension of modern battle, can only consist, for the commander-in-chief, in clearly determining the result to be aimed at, the general function ascribed to each subordinate unit in the operation undertaken by the whole of the forces; at the same time such a determination must leave the subordinate chief entirely free to choose the means which have to be used in order to reach, in any particular case, the result demanded, and that in spite of adverse circumstances which cannot be foreseen in advance.

It follows therefrom that the army commander, after he had imparted to the commander of the Sixth

Corps at Opocno *all* information concerning the enemy which might be of interest to him, and after he had let him know the movements of the army, would have done well to confine himself to the following order:

"In view of covering the concentration which is being proceeded with at Josephstadt, you must proceed to Skalitz, wherefrom you will hold the roads to Nachod and Kosteletz. The reserve cavalry divisions will be at your disposal."

As a matter of fact, General Benedeck's order leaves Josephstadt at 9 p.m. At 8.50 the news, confirmed several times during the night, comes from Nachod that the enemy has carried and occupied that place. This piece of information, which would have been of the highest interest to the commander of the Sixth Corps, is not communicated to him. Raming will start the day after, ignoring the presence of important enemy forces seven miles from his first-line troops. How could his disposition correspond to the reality of things?

It was only at 1.30 a.m. at Opocno, that the commander-in-chief's order dated 8 p.m. was received, in spite of the short distance (nine to ten miles) which that order had to cover. The corps commander immediately altered his original dispositions and gave, at 2.30 a.m., the following order:

"The Hestweck brigade will march by Bestwing, Spie, Neustadt, Wrchowin on Wysokow, where it will face east; the Jonack brigade will march by Spie, Neustadt, Wrchowin, Schonow, and Prowodow on Kleny.

"The Tosenzweig brigade will march on Bohuslawitz by Cerncic, Krein, Nahoran, Lhota, and Spita towards Skalitz, and will take position north of that place on the right bank of the Aupa, facing east.

"The Waldstätten brigade will march by Rohemic, Slavetin, Rostock, Nauzin, and Jessenitz towards Spita and Skalitz, where it will take up its position facing east.

"The Hestweck brigade will break up at 3 o'clock; the Jonack brigade at 3.30; the two others at 3. Only the light baggage will be taken. Heavy baggage to be directed on Opocno."

The artillery reserve was to proceed towards Kilow,

marching behind the Waldstätten column; the corps hospital company was to proceed on Xajezd, the ambulance on Schweinshädel, the convoys on Josephstadt.

Owing to the great distance between the headquarters at Opocno and the cantonments occupied by the brigades, the order arrived late. Certain troops only received it after the moment when execution ought already to have begun.

As has been seen, General Raming did not decide either to take up a *position with his army corps in order to stop* the enemy, should the latter debouch from the mountains, or to *throw him back by an offensive*, should the opportunity arise.

He did not define either of these results to be aimed at. He even put himself in such a situation as to be unable to attain either of them in case his decision should become clear to him while he was on the way.

Even if the enemy did not impede his movement, he would further find himself, by the end of the day, in a very risky situation, with

One brigade at Wisokow;
One brigade at Kleny;
One on the right bank of the Aupa, north of Skalitz;
One between Spila and Kalitz;
Artillery reserve at Kikow.

Each of these brigades, moreover, was to take position on the ground ascribed to it, face to the east: an arrangement which could only end in four successive and distinct brigade combats, if one takes into account the distances (four miles from Wysokow to Skalitz, two and a half from Wysokow to Kleny) as well as the obstacles, such as the Aupa separating the brigades from each other. This was an arrangement which, in any case, made it impossible to start a combined action of all the forces of the army corps at any moment, either in order to manœuvre and attack, or in order to resist and then counter-attack.

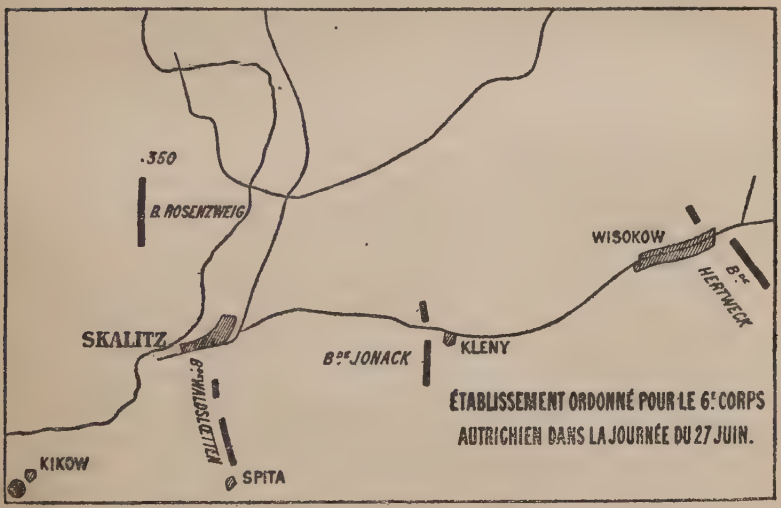
Suppose, however, the enemy should come on while the corps was still marching on Skalitz, the same impossibilities would arise: it would be in no way possible to oppose the enemy with a whole army corps, but only with four brigades and an artillery reserve, acting separately, without mentioning all the other elements

of the fighting train which were also scattered along their own itineraries.

A complete lack of objective spirit here again characterises this order of General Raming's. No mention is made in it either of the enemy or of tactical operations. How could there, then, be an adaptation of the means to the end, or an orientation of forces in the direction of that end? Is it not to be expected that those means and forces will be lost in a complete impotence?

The order leads to some further interesting remarks:

(1) Information coming from General Headquarters



did show that the enemy was ready to attack; the enemy was more specially reported to be near Lewin and Reinerz. The alarm given to the Jonack and Hestweck brigades on the evening of the 26th confirmed such a forecast. The right column of the Austrian arrangement, being more exposed to attack, ought to have been abundantly provided with cavalry and artillery. As a matter of fact, it lacked cavalry; the available cavalry regiment was marching with the Jonack brigade, which had been endowed with it up to then in order to perform the mission of an advance guard; doubtless want of time prevented the ascribing to that regiment of a new and more rational duty.

Again, the Hestweck brigade has only one battery at its disposal, which is insufficient; the other brigades have one too: it is more than they need.

(2) The left-hand column is followed by the whole artillery reserve. The latter is not wanted there at all; that is obvious. Suppose it should be necessary to remove that artillery in order to send it elsewhere, the movement could not but take a very long time, and that artillery would arrive very late.

(3) Again, we find here the characteristic faults of the mathematical, inelastic order, resulting from a fixed and symmetrical apportionment of means. The threatened wing is always too weak; the one that is not threatened is always too strong. Moreover, the main body of forces is not free to act where one wishes and as one wishes. There is no such thing as a main body in reserve, nor is there any security service covering it.

If, then, the enemy comes on, action cannot be *avoided*. Moreover, the action, once engaged, cannot be directed; for the forces, in consequence of their distribution through space, will all go into action simultaneously. In order to conduct an action, it is necessary to *create reserves*, to prepare a manœuvre, to conceal it, to carry it out. The thing is impossible here if the adversary attacks; the four brigades will almost immediately be all of them in the thick of the fight. It will no longer be possible to dispose of them, to handle them at will.

(4) Even before the army corps could come in touch with the adversary, its distribution made any sort of manœuvre very difficult, in view of its extensive front (6 to 7 miles), a change of direction by the heads of the columns would be a very long operation; a change of direction by the flank impossible; no depth was available for manœuvre.

Let us to-day take up the question on our own account; let us suppose ourselves to be at Opocno and to have received an order which, after imparting to us the information to hand, orders us, in order to protect the concentration of the army at Josephstadt, to bring the army corps to Skalitz, from which place it will have to guard the roads to Nachod and to Kosteletz.

What is the problem? We have to go to Skalitz, but with what object?

1. If the enemy is not met on the way, the object is to take up, near that place, a position from which to act on all the dangerous roads. Once those dispositions shall have been taken, should the enemy then come on from Nachod (for instance), the army corps must prevent him from debouching out of the pass; if need be, it must, by means of a vigorous offensive, throw him back into the pass. With a view to this contingency, the army corps must secure the possession of the plateau which commands the Nachod pass. An advance guard will be sent in that direction towards Wysokow. For similar reasons, a second one will be sent in a northern direction to keep us informed of enemy movements, to hold all the issues through which he may come on: such are the tactics to be adopted, once we are arrived on the spot.

2. If the army corps previously meets, while on the march, the enemy debouching from Nachod, there must be no hesitation; the enemy must be attacked. He must be thrown back into the pass, an operation which will also guarantee the occupation (to be carried out later on) of the Skalitz position. Our army corps must, then, march in a formation that will allow it to look out for battle and undertake action with all its forces, instead of being drawn into it piecemeal.

3. In either case, the retreating enemy must not be followed beyond Nachod.

4. If we do not succeed in throwing the enemy back into the pass, our army corps must nevertheless attempt to reach the Skalitz position; to this end, it will manœuvre.

Such being the terms of the problem, the tactical conditions, how shall the movement be organised?

Four roads are available, that is obvious. Shall we use them all?

One division marching separately on a road has a length of about 15 kilometres (9 miles). A second division following the first one is no more than 9 kilometres (5¼ miles) long.

If the divisions march by themselves on two roads separated by a distance *d*, they can only be assembled on a point *a* on the first road within the time necessary for the last element of the second division to arrive, that

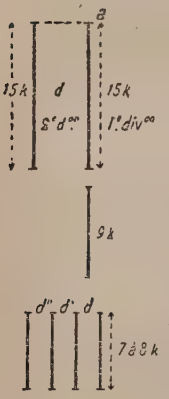
is, to cover 15 kilometres + d. If both divisions march one behind the other, the time necessary for assembling is that which is wanted for covering 15 + 9 = 24 kilometres (15 miles). According, therefore, to whether d is greater or less than 9 kilometres shall we determine whether we must use one road or two.

If a given corps is subdivided into four brigades, on four roads, the time necessary for assembling is the time wanted for covering

$$8 + d + d' + d'';$$

if then

$d + d' + d''$ is greater than 24–8, that is, 16 kilometres



the use of four roads would result in a material loss of time.

Other reasons, however, to wit, tactical reasons, strictly limit the number of itineraries to be used.

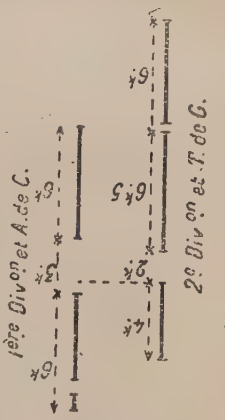
While on the march to Skalitz we must be ready to receive the enemy, should he come on, and even to attack him under favourable conditions, with a *main body of forces;* a body which must be capable of manœuvring up to the last moment; which must therefore be *assembled;* which must be capable of altering the distribution, and arranging the economy, of its own forces, of pushing them ahead while concealing them; which, in order to meet those conditions, must be organised in *depth.*

For these various reasons, we will only use two roads. That of Dobruschka, Neustadt, Wzchowin, and that of Pohor, Bohuslanitz, Cerncie, Nahoran, Lhota. The average distance between those two roads is but 4 or 5 kilometres (2½ to 3¼ miles).

The main body of the army corps will march by those two roads. In order to retain its freedom of action and the free disposal of forces we have just seen to be necessary, *it will be provided with a tactical advance guard:* on what side? On the enemy's side, that is, on the right-hand road. Of what element should that advance guard be composed? Of troops capable of keeping the main body *informed* and *covered* for a long time; of seizing

the enemy. Hence a need of cavalry: the available cavalry regiment will be attached to it; of infantry: one brigade (1st brigade); of artillery: the two groups actually to hand at their present establishment. Behind this advance guard, the main body will go forward, marching by both roads. *On the right-hand road:* the remainder of the 1st division, the corps artillery: the latter so placed as to be able to reinforce the advance guard quickly with an arm which, once it is in action, will allow the commander to distribute freely later on the forces of his main body, according to a plan which can only be arranged at the very last hour.

On the left-hand road: the remainder of the army corps that is the second division; covered by an advance guard to give physical or material security: one infantry regiment, with some artillery and the divisional squadron.



Now the Prussian dispositions, on their side, were not tactically safe:

1. Sending the advance guard as far as the frontier, at a short day's march from Reinerz, was obviously not without danger, but was justified by the general situation and also by the nature of the ground which made it necessary to dispose the troops in echelon.

2. Pushing that advance guard further on, as far as Nachod, as did General von Loewenfeld on the evening of the 26th, was a piece of foolhardiness involving serious risks. It would be difficult to ask an advance guard, six battalions, four squadrons, twelve guns strong, to resist for five or six hours, in front of a pass, on the space necessary to the deployment of the army corps behind it, in the presence of far superior forces.

The presence of such superior forces in the neighbourhood of Nachod was known. They knew that an Austrian army corps had been concentrated on the 26th at Opocno; they knew that other columns were assembling at Skalitz. Therefore they must expect to be violently attacked on the 27th when debouching in direction of Opocno or Skalitz. They could not hope

to debouch and deploy in the presence of those superior forces, save by taking special dispositions which would allow them to master the difficult situation in which they would find themselves. Those dispositions ought to have consisted :

1. In reducing the distance between the advance guard and the main body, so that the latter should be able to support the advance guard as soon as possible.
2. In increasing the artillery of the advance guard.
3. In marching in a formation as dense as possible, so as to shorten the duration of the crisis.
4. In undertaking the march so as to appear at Nachod early on the 27th. Instead of starting at 5 a.m., they ought to have started at 3.

Objection may be raised to so cautious an arrangement. It may be said that, as a matter of fact, this foolhardy leap forward of the evening of the 26th made the Prussian corps master of the bridge and of the crossing of the Mettau. The advantage was not such as to outweigh the risks of the undertaking; for, given the weak occupation of the bridge, the small importance of the river (both of which were known), it would have sufficed to send on the pioneer battalion, during the night, to carry the enemy posts, to start repairing the bridge and organising new crossings near it, so that the main body should carry out its march without being detained.

But that rash act was also full of *inconvenience*. The entrance of the Second Army into Bohemia was to be effected on several points *simultaneously* and by *surprise*. Every army corps ought to have complied with this capital feature of the operation. The Fifth Corps was betraying the secret when, on the evening of the 26th, it sent its advance guard on to Nachod.

The Austrian command heard by telegraph, in the evening of the 26th, the news that a Prussian advance guard had crossed the frontier; it thus had the time needed for taking such counter-dispositions as would impede the intended operation.

As a matter of fact, the Austrian commander-in-chief received at 8.50 at Josephstadt, a report to the effect that the post of Nachod had been attacked by very superior forces and had in consequence withdrawn on Skalitz. It could not be expected that he would not take any special decision on hearing such news. At the

moment this ill-timed warning was given to the Austrian command, the want of resolution it actually showed could not have been foreseen.

The study of the campaign of 1806, which contained a similar case, is most instructive : we there see Napoleon proceed in an entirely different manner in order to take the passes through the mountains by surprise, and to prevent the enemy from arriving and defending the threatened points in time. Thus, on the evening of the 25th, Napoleon, had he been in command of the Prussian body, would have still kept his troops echeloned in depth, at the distance of one long march from the frontier, so as to leave his opponent ignorant of which pass he intended using.

On the 26th, he would have arrayed his army corps on the frontier after a long march; the head of the Fifth Corps would have reached Schlaney; the same corps would have closed up on that head and adopted, from Schlaney to Lewin, the closest possible formation, so as to form what the Emperor called the "war mass."

On the 27th, the head of the army corps, after starting at 3 a.m., would have reached Nachod at 4 (it is less than two miles from Schlaney to Nachod). The rear of the army corps would have entered that place two or three hours later.

What could the Austrian command have done then, even if it had been endowed with activity and decision?

No decision can be taken on the 25th. The enemy's schemes have not been disclosed. On the evening of the 26th, these schemes are becoming clear everywhere; the Austrian command resolves on a number of measures in order to counteract those schemes.

On the 27th, those measures are carried out, too late, however, to enable Austrian forces to reach Nachod before their adversary.

Such is the distance between the master and the disciple.

Napoleon has been at the pains of himself describing his manner of proceeding. Sending orders to Marshal Lannes, commanding the Fifth Corps, one of the corps on advance guard in October 1806, he writes :

"On the 7th, you will canton between Hassfurt and Coburg (approach march).

"On the 8th, you will enter Coburg (which corresponds

to Nachod in our case), so as to arrive there with the whole of your army corps, and so that *an hour before your grenadiers enter, nobody in Coburg should suspect hostilities to have begun:* having arrived at Coburg on the 8th, you will take position ahead of that town and arrange everything so as to be at Grafenthal on the 10th, when you must hold yourself ready to lend us your support."

Again, to Marshal Soult:

"The Emperor orders that you take measures to enter Baireuth on the 8th at as early an hour as possible. You will enter there in *mass*, so that, one hour after the first of your hussars arrive, your whole army corps should be at Baireuth and be able to advance a few leagues further on. . . ."

Development of the Action from 3 o'clock to 8.30

(See Sketch A)

On June 27th, 1866, the Fifth Prussian Corps left its bivouacs and cantonments at 5 o'clock for Nachod. The advance guard, which was well ahead, only began its march at 6.

At 8, the head of the advance guard (two battalions [2nd and 3rd of the 37th], two Jäger companies, two squadrons of the 4th Dragoons, one battery) found itself at Branka, ahead of Nachod.

It sent out (to reconnoitre without delay, along the road to Newstadt) one squadron of dragoons and half a company of Jäger; on the broken and wooded ground north of Branka, towards Kramolna, where some enemy cavalry had been seen, one company of Jäger; on the road to Skalitz, one squadron supported by one battalion (the 3rd of the 37th, which was incomplete for the time being, owing to half the Bojan battalion being late), which were to occupy Wysokow.

Steinmetz arrived at Nachod about 8; he received there a report that the advance guard had debouched without meeting the enemy. Thinking that the day would be passed without encountering any difficulties, he informed the 2nd division of the Guard that he did not think he ought to ask for the assistance they had offered him at Kronow.

The commander of the advance guard was busy

Kramolna

NACHOD

Idotter Hof

1165
Plateau de Wysokow

Starkow

Wysokow

Ittstadt

Bgte de Branka

Broumov

Bruarz

C.Ch.

Bromadow

Nechoix

Vehanow

Situation
vers 9.h du matin

Echelle au 1/25000

2 Kil

organising his outposts when he received from the squadron on ahead along the road to Neustadt the news (at 8.30) that the enemy was approaching. When the squadron had arrived on the plateau, they had seen strong columns of all arms marching on the road to Neustadt and in the direction of Skalitz. These latter had already reached Schonow, Prowodow, Domkow. The scouts, Prussian dragoons, had been received by a violent fire on approaching these columns.

The commander of the advance guard then ordered the commander of the head of the advance guard to proceed to the Wenzelsberg plateau, in order to check the enemy at the road junction with the help of all available troops remaining (2nd of the 37th, half-company of Jäger, one battery). At the same time he sent to the main body of the advance guard at Altstadt the order to advance towards the Wenzelsberg plateau by the height of Branka which lies south of the road junction.

Let us follow the advance guard in the development of its mission, and let us see what becomes of our three terms :

Reconnoitring : the Austrians not being seriously covered, the Prussian dragoons have easily discovered two columns to be on the march, one towards Domkow, the other towards Wysokow. This is more than is needed for taking a decision. The reconnaissance is for the time at an end.

Laying hold of the enemy, fixing him, while one prepares to strike; this cannot be thought of here, the manœuvre is far from being ready to execute. The army corps is still on its way; the head of its column will not arrive till noon.

Covering the point of debouching for the arrival, for assembly, and, finally, for the entry into action of the army corps, becomes an important and pressing matter; it is 8.30 a.m., the advance guard will have to perform that heavy covering task unaided for nearly four hours. This function is first ascribed to the 27th Prussian regiment. That regiment had not fired a shot since 1815. It had not taken any part in the affray at Schleswig-Holstein in 1864. A fifty years peace-training was about to be applied here against the Austrian army which has fought recently (in 1859). We shall soon find, on one side, men who know war without having made it,

the Prussians; on the other, men who have not understood war even after waging it.

The Prussian commander meets the first enemy threat by making the following distribution:

1 squad.,	½ batt.,	½ co.	of Jäger on the road from Skalitz to Wysokow.
	½ „		marching towards the same point.
1 „		½ „	on the road to Neustadt.
	1 „		1 battery marching on Wenzelsberg.
		1 „	at Kramolna.
—	—	—	—
2 squad.,	2 batt.,	2 co.,	1 battery.

The remainder of the advance guard (three squadrons, three and a half battalions, two companies, one battery) arrives from Altstadt on the plateau.

A very sound distribution indeed.

Everything was sent on to the plateau (less the half-battalion kept at Altstadt), because the point of debouching must be *covered*; the entry into action of the army corps must be prepared at all cost.

Covering implies holding all the points whereupon the enemy might fire on the point of debouching, and also the whole ground needed by the army corps for going into action, in width as well as in depth.

The advance guard, therefore, extended itself at once over a front two and a half miles wide, for local circumstances made this necessary. The danger thus created for the advance guard was very great, but this peril of loss did not much matter, provided it could only *last out* during the time necessary for the army corps to arrive—that is, until noon.

Such was the idea of the commander of the advance guard, wherefrom we shall see derived the *special brigade action* he was about to initiate; it is by resorting to tactics and necessarily to tactics in detail (seeing his extreme dispersion) that he was about to try and *last out* in that situation. We shall see how, on the opposite side, the Hestweck brigade—advance guard, *de facto*, of the Austrian corps—misappreciated its mission of an advance guard, embarked purely and simply upon a mere diagrammatical brigade action which, having been

little thought out at its inception, could not be carried out in a rational way, and lacked all manner of leadership as well as of logical tactics.

Let us now turn to the Austrians.

The Hestweck column, having started at 3.30, twice crossed (at Spie and at Wzchowin) the Jonack column, a thing which suspended and delayed its march. It came into contact with the enemy at 7.30 with its advance guard (25th Jäger battalion and two guns). At that moment :

The Jonack column was marching on Domkow; the Rosenzweig column was marching on Lhota; the Waldstätten column was marching on Skalitz, where it was to assemble. Meanwhile, General Raming, coming to Skalitz, then to Kleny, found there the commander of the 1st cavalry division, who told him that his outposts had been driven back from Wysokow. He ordered in consequence :

The Hestweck brigade to continue marching on Wysokow;
The Jonack brigade } on Kleny, while sending out
The Rosenzweig brigade } 1 battalion on Wysokow.
The Corps artillery } on Skalitz; in reserve.
The Waldstätten brigade }
The cavalry division { Solms brigade at Kleny.
Schindlocher brigade at Dolan (3 or 4 miles from Kleny).

In so doing, General Raming was deciding to adopt the second interpretation of General Benedeck's order, as, by these dispositions, he was bringing all his troops up nearer to the pass. But, when thus passing to the offensive, he ought to have secured the means : 1*st*, of carrying out that offensive towards Nachod and Wenzelsberg; 2*nd*, of carrying it out securely and quickly, for he might have had to act in *other directions* as well.

Nevertheless, the dispositions he had taken, however imperfect, made the situation of the Prussian advance guard more perilous. For, in the first place, the head of the advance guard (two battalions, one battery, one squadron) would have to fight the Hestweck brigade consisting of seven battalions and one battery of eight. In the second place, the whole advance guard (seven

battalions, two batteries, four squadrons) would have to fight two and even three Austrian brigades.

Before seeing how that advance guard will act, let us examine the ground.

Position on the Wenzelsberg Plateau

The road to Neustadt follows a hollow, the Branka-Schlucht, then the western outskirts of Branka forest, which occupies the highest part of the plateau. That forest is bounded to the east by steep and cragged slopes which fall on to the Mettau. The summit of the plateau rises, with the road following it, then runs east of the road, which though no longer at the greatest height, still forms, with the edge of the forest, a powerful line of resistance. There lies the last " point d'appui " for troops fighting face to the west. One cannot, however, use there any large numbers of cavalry or artillery, on account of the woods and of the steep slopes which fall down to the Mettau.

The Wenzelsberg plateau commands the whole ground to the east, more particularly the heights of Kleny. Observation is, however, hindered by the woods which stand half-way down the slope, in the direction of Prowodow and Schonow as well as in that of Neustadt and Wzchowin. Any assailant coming from those directions could find, among those numerous woods and hollows, protection and shelter from both the observation and the fire of the defence; cover which, on the day of the fight, was increased by the advanced growth of the crops.

Thus the line of defence of the Wenzelsberg plateau for a force facing westwards does not lie on the ridge, but half-way down it. It may be drawn by the western outskirts of Wysokow, the south-western outskirts of the small wood (Wäldchen), the evangelical church of Wenzelsberg, the forester's house and the patches of wood which surround it to the east, and so to the south as far as Sochors.

From that line there falls a slope of from five to ten degrees, entirely uncovered, and allowing a very powerful artillery and infantry fire to develop. This line of defence is also high enough to command the heights of Kleny. Its development is on a front of about

4000 yards. It makes a good defensive position for an army corps. How should an army corps occupy it to this end?

The distribution of forces would involve the occupation of the villages with infantry reinforced by a few batteries; the assembly of some cavalry and artillery between Wysokow and the wood to the south (Wäldchen), and the assembly of the whole of the reserve infantry on the plateau east of that wood—an infantry detachment, with some artillery, being established on the plateau north of Wysokow.

The disadvantage of the position arises from its lack of depth; hence a difficulty in moving artillery and cavalry to the rear. In spite of that, it is easy to see that once the position had been occupied in the manner just described, it could not be easily outflanked by its left, in view of the woody nature of the ground there; also that, in case it should be manœuvred by its right, by an attack aiming directly at Nachod, one would still have the time, thanks to the detachment holding the plateau north of Wysokow, to take counter-measures so as to stop the enveloping movement; which, in any case, would take a long time to carry out.

On the other hand, we find, ahead of the front, the villages of Prowodow and Schonow, behind which the adversary may assemble and dispose his troops; and where, in case of a check, he can find a rallying position.

The rivulet which flows from Wysokow to the north-west of Prowodow may be entirely overlooked; it is provided with numerous crossings; it is nowhere an obstacle: the meadows along its banks are dry and hard.

Given that ground, what part was it about to play? What should we expect to happen there on the 27th?

In view of their situation and overwhelming superiority, the Austrians obviously must (and could) seize as soon as possible the line of defence mentioned above, in which case the fate of the Fifth Prussian Corps would have been already half settled. Its situation would in any case have become very difficult, for the Austrians, starting from those villages, had every opportunity for driving back such Prussians as had reached the road to Neustadt. The objectives to be aimed at to this end were Branka wood and Branka height. The

Prussians had, on the contrary, to try and occupy the position of Wenzelsberg and the surrounding woods, to organise there a first line of resistance, the second line being formed by the Branka hollow and the western outskirts of Branka wood.

A few remarks must be made here on the limits of the aid which that second line would afford.

On the front Branka-Schlucht, Branka wood, infantry only could be used; the ground to the east being impracticable to artillery; the view was, moreover, very limited. On the left wing, artillery would find it difficult to move and to withdraw. On the right wing, south of Wysokow, artillery might well find a few positions, but it would soon be exposed to fire from the small wood (Wäldchen).

2. On that front, the efficiency of fire might very easily extend up to 500 yards. Available cover was poor; the roadside ditches were not worth mentioning, the woods were either spinney or underwood. Only a few big trees could supply any protection.

3. Retreating from the position would be difficult because of the steep slopes and thick undergrowth. The retreat from Nachod might be cut off by an enemy marching on Altstadt. On the other hand, there was behind that position hill 1113, which it might be useful for the Austrians to carry, for they could fire from there on the whole road from Altstadt to Nachod.

After having thus briefly studied these two main positions, let us return to examining more carefully the "points d'appui" which form the first one, so as to try and understand, later on, the events which took place there.

The wood north of Wenzelsberg (*Wäldchen*, on the German maps) is 300 yards long on its north-western outskirts and from 1300 to 1400 yards deep. This wood consists in young spinney timber, and irregularly cut undergrowth, with clearings; the whole being cut up by green ways, would parcel out the fight on the same framework. It is fenced on its north-eastern and south-eastern outskirts by a high hedge-bank like those one sees in Brittany.

The interior contained deep gullies, the dry beds of streams. The most important of these gullies runs near

the northern edge of the wood. The action was to show its tactical importance. This gully is, almost from its origin, 30 to 45 feet deep, and about as wide, with very steep sides. It creates an obstacle for infantry movements. That part of the ravine which touches the outskirts of the wood provides a good shelter for infantry, which can find there an excellent field of fire over the slope before them, facing the Skalitz road. The south-western edge of the wood is straggling and not clearly determined.

Wenzelsberg possesses, at its two north-eastern and south-western ends, *two solid buildings*, the evangelical chapel and the church of Wenzelsberg.

The evangelical chapel provides a very good "point d'appui" facing Meierhof, with a *good glacis* towards that village, which it dominates by about 150 *feet*. The whole position includes the chapel and its surrounding walls. It has, however, alongside of it two hollow roads which supply excellent cover for an approaching assailant. It is a position easy to fortify with field tools.

From this point, to the right and to the left, run a number of orchards which border Wenzelsberg; a poor village, with small houses, more especially in the southern part. Houses become more numerous in the northern part, also better grouped and more important; the gardens provide good observation.

The church of Wenzelsberg is a strong building, without any opening on Branka, with an opening on Wenzelsberg, a few windows right and left. In order to turn it into a good redoubt, a few improvements were wanted, in the church itself and in the main wall.

Between Wenzelsberg and the forester's house, one also finds a *great ravine* which is in itself *an absolute obstacle for artillery, cavalry and infantry marching under fire*. It is more practicable at its two extremities. It provides an opening and a means of approach for small detachments.

The forester's house is a strong house, but without a surrounding wall, little fit for defensive purposes, easy to approach owing to the shelter an assailant would find up to the very entrance of the house.

The small triangular wood, east of the evangelical church, has no tactical value. It has no observation. It is a mass of young thickets.

The patches of wood on the slope of the plateau, in the neighbourhood of Wenzelsberg, of the forester's house, of Sochors, include a number of high-stemmed pines and other trees, favourable in general to the defensive, but little favourable to any movements save those of quite small forces.

To sum up, the Wäldchen, the church of Wenzelsberg, the surrounding woods supply good "points d'appui" against an adversary coming from Branka; the efficiency of the fire for which they allow is limited, however, as the marching assailant is partly concealed from the defender by the Branka heights and woods. On the other hand, to debouch from these Branka heights and woods remains for the enemy a problematical matter. It is difficult for him to follow up his attack with artillery or cavalry.

Against an adversary coming from south-west of Prowodow, of Schonow, the places occupied by the defenders allow for a large use of fire; they form a commanding position; those advantages are countered by the lack of continuous hedges or wood-lines, by the cover, and the sheltered approaches the assailant finds in the small woods and in the ravines in front. The strongest "point d'appui" for defence is the evangelical church.

The Action of the Van of the Prussian Advance Guard against the Hestweck Brigade: the Entry into Action of the Main Body of the Prussian Advance Guard (8.30, 10.30 a.m.)

(See Sketches B and C.)

It was at Wrchowin that General Hestweck received from his Uhlans the first report that Prussian troops were on the Wenzelsberg plateau. He thought it possible to deduce from this piece of intelligence that the enemy had established himself on the plateau facing the south. He decided, in consequence, to oppose him with one battalion (3rd of the Gorizutti regiment) and one infantry company (of the Kellner regiment), while he, with the remainder of his forces, should continue his march on Schonow and from there against the enemy's flank.

This detachment, formed on the road to Neustadt,

Croquis B

Krannolna
Lhother Hof
NACHOD
1165
Plateau de Wysokow
Starkoc
Wysokow
Branka
Altstadt
Coupure de Branka
Haut.r de Branka
Bois de Branka
Des Waldchen
Eglise de Wenzel
Wenzelsberg
Eglise Evang.e
Prowodow
Domkow
Schonow
Sochors
Kleny
Meyer Hof
Situation
avant 10.h du matin.
Echelle au 1:25000
2 Kil
NANCY LITH. PERGER-LEVRAULT

Kramolna

Lhotker Hof

NACHOD

1165
Plateau de Wysokow

Markow

Wysokow

Mustadt

Branka

Kleny

Wenzelsberg

Kronow

Domkow

Schonow

1½ C.Ch. III/37

E/58

2 Esc. 4e Rt Dr.

4 Esc. 4e Rt Dr.

III/37

I/37

I/58

½ c.ch.

25 Ch

14 Ch.

II/37

IV/58

I/37

I/58

F/58

10h ½.

Situation de l'Av.t G.de prussienne
Déploiement et attaque de la B.de Jonack
Déploiement de la Brig.de Rosenzweig.

Echelle au 1:25 000

easily drove back the Prussian dragoons over covered and difficult ground. Between 8 and 8.30 the brigade arrived at Schonow.

The head of the advance guard, including the 25th Jäger battalion and two guns, then advanced from Meierhof towards the evangelical church at Wenzelsberg, occupied the churchyard with two divisions, deployed one division as skirmishers in the orchards and gardens ahead, placed its two guns south of the church, wherefrom they immediately started firing at the head of the Prussian advance guard.

Meanwhile, the brigade took up north-east of Meierhof the following battle-formation :

1st line : three columns of division at deployment distance (1st, 2nd Kellner battalions).

2nd line : one battalion in company columns (3rd of the Kellner regiment).

3rd line : two battalions in company columns (1st, 2nd Gorizutti battalions).

The battery deployed on the right of the first line and opened fire at once against the Prussian artillery. The 3rd Gorizutti battalion had come nearer, and was occupying at that moment a tiny wood on the right of the battery near the forester's house.

At about 8.30, the deployment having been completed, a short rest was taken; they began the attack between 8.45 and 9.

On the Prussian side, at about the same time, one battalion (2nd of the 37th) half a Jäger company and one battery could be seen hasting up the road to Neustadt, then taking the direction of Wenzelsberg and deploying the two half-battalions (Schimonski, Braunn) in the free space between the Wäldchen and the wood east of Wenzelsberg.

The battery took its place between the two half-battalions, in order to cover the flanks. They had also sent out the half company of Jäger into the Wäldchen, and skirmishers into the wood east of Wenzelsberg.

On the road to Neustadt, the three dragoon squadrons which had rapidly come up from the main body of the advance guard, had arrived in support of the repulsed squadron. As the Austrians had taken possession of the close ground half-way down the slope, the cavalry could not efficiently act to the left of the Prussian

attack: they went back behind the right wing, but within supporting distance.

A little before 9 the Austrian brigade advanced up the slope, on both sides of the evangelical church, with a weak line of skirmishers in front; it was received by a well-aimed fire from the Prussian skirmishers fairly sheltered by the corn-fields, the woods and a small hillock east of Wenzelsberg. It was compelled to stop and to throw itself back into the neighbourhood of the evangelical church. The Prussian batteries had at the same time inflicted such serious losses on the right wing of the Austrian brigade, that the latter was obliged to retire to Schonow, 1500 yards behind; the two Austrian guns established near the evangelical church were equally compelled by Prussian infantry fire to withdraw on Meierhof.

At 9.15, General Hestweck gave the order to push the 2nd line battalion (3rd of the Kellner regiment) forward, so that it should extend the right wing of the 1st line, while the 3rd line was ordered to come up nearer the 1st.

The attack was then carried out: on the left wing, by two battalions (2nd Kellner and 25th Jäger battalion), which, by utilising the gardens east of the village streets as shelters, marched against the church of Wenzelsberg; on the right wing, by two battalions (1st, 3rd Kellner), which marched against the wood east of Wenzelsberg; supported by the 3rd Gorizutti battalion, which marched northward from the forester's house, in the direction of the same wood, forming a sort of échelon in the rear and to the right.

The Prussian battalion received the attacking enemy brigade at 500 *yards* by a well-aimed and very efficient fire. The fire was delivered in small volleys from the supporting elements which came running up in line on to the height. At the same time, a rapid and *flanking* fire came from the Wäldchen and surrounding woods.

The Austrian columns stopped, wavered, but soon marched on again. The Prussian half battalions, however, advanced also and delivered at very close range such a powerful volley fire that the Austrian masses turned about, completely broken.

What had happened? The two battalions of the left wing of the 1st Austrian line (the Jäger battalion

and the 2nd of the Kellner regiments) had reached without difficulty the churchyard of Wenzelsberg and the northern outskirts of Wenzelsberg village; leaving part of their forces to occupy those points, they attempted several times, with a portion of the Jägers and one of the 2nd Kellner battalion, to attack the Wäldchen. They were, however, repulsed by the fire from the Prussian Jägers, who had, moreover, just received reinforcement. Some of these detachments sustained heavy losses during that attempt.

Both battalions of the Austrian right wing had been held up by small forces, mainly on account of the large ravine they had had to cross. Very much disorganised by the crossing of that obstacle, they none the less advanced up to a distance of about 120 yards from the wood east of Wenzelsberg, where they were brought to a sudden stop by the powerful Prussian infantry fire. They sought shelter, in a state of disorder, within the ravine.

At the moment when the 2nd battalion of the 37th was receiving the Austrian 1st line in this fashion, the 3rd Gorizutti battalion, a refused echelon of the Austrian first line, was joining in the attack. It debouched from the patches of wood near the forester's house and crossed the upper end of the ravine. The half-battalion of the Prussian left wing (Braunn) faced to the left and attacked in and between the patches of wood, whence the Austrians were debouching, while at the same time two half-battalions of the main body of the Prussian advance guard (Vogelsang of the 1st of the 37th, and Pfug of the 1st of the 58th) deployed, starting from the Neustadt road in the direction of the Bracez gap, and ran up in support of the counter-attack then already undertaken.

The Austrian battalion was thrown back and slowly withdrawn, under fire, on to Schonow. It was followed in that direction as far as Sochors by the half-battalion of the 1st of the 58th. The other half-battalion of the main body of the Prussian advance guard (Vogelsang of the 1st of the 37th) occupied the patches of wood east of the forester's house, and the half-battalion of the head (Braunn of the 2nd of the 37th) again resumed its position near the Schimonski half-battalion.

There then occurred an interval in the action during

which the Austrians confined themselves to firing from Wenzelsberg and Wenzelsberg church. The battery of the Jonack brigade west of Prowodow took part in this fire, and General Hestweck formed his 2nd line in view of another attack.

On the Prussian side, the 2nd battery of the advance guard joined the 1st one. Little by little the battalions of the advance guard had arrived on the plateau.

As a matter of fact, the attack by the Austrian 2nd line had been made when two half-battalions of the main body of the Prussian advance guard (Winterfeld of the 1st of the 27th and Schreiner of the 1st of the 28th) had already come up in support, in the Wäldchen, of the half-company of Jäger there established, and had reached the outskirts of that wood, while the two other half-battalions, as has been seen (Vogelsang of the 1st of the 37th, Pfug of the 1st of the 58th), were making for the patches of wood and the forester's house.

The two battalions of the Austrian right (1st and 2nd of the Gorizutti regiment) hurled themselves back into the ravine, whence they kept up, by fire alone, a struggle which remained undecided, while the fact that the Austrian left had seized Wenzelsberg might still bear important consequences. The 3rd Kellner battalion and a few Jäger companies which had proceeded as far as the ravine appear to have debouched on the forester's house.

The position of the Austrians in the ravine and around the forester's house was being taken in reverse by the Prussians from Sochors and was already very critical, when yet another two half-battalions (Wernecke and Gronefeld of the 2nd of the 58th) arrived at Sochors.

An attempt made by the 3rd Kellner battalion, starting from the forester's house, to capture Sochors, failed so completely that the half-battalion (Wernecke of the 2nd of the 58th) at once retook the forester's house and the small patches of wood. The other half-battalion (Gronefeld of the 2nd of the 58th) advanced within the woods south-east of Sochors.

The 2nd line of the Austrian brigade could no longer remain in the dry bed of the brook. It withdrew on Schonow, where General Hestweck assembled his troops. Only the 25th battalion and half the 2nd Kellner

battalion continued to occupy Wenzelsberg church and Wenzelsberg.

While it was supporting these attacks the Prussian advance guard called back all useless detachments. Thus :

(1) The Jäger company sent to Kramolna joined at Wysokow the half-battalion established there.

(2) The Bojan half-battalion of the 3rd of the 37th, which had supplied the outposts at Nachod and had arrived late for that reason, was placed *in reserve* at the outskirts of Branka wood, north of Wäldchen.

(3) The two Jäger companies of the main body were set near Bracez, where they held the road to Neustadt.

The distribution of the Prussian forces at this moment was therefore the following :

At Wysokow : half a battalion (Kurowski of the 3rd of the 37th), with one Jäger company.

- In front of Wenzelsberg — 2nd of the 37th in action, flanked
  - in the Wäldchen by
    - ½ co. of Jager;
    - ½ the 1st of the 58th.
    - ½ the 1st of the 37th.
  - to the south by
    - ½ the 1st of the 37th
    - ½ the 1st of the 58th
    - 2nd of the 58th
    - ½ F. of the 58th which held the forester's house and surrounding patches of wood.

Two Jäger companies held the woods on the road to Neustadt; half the F. of the 58th (Suchodoletz), remained at Altstadt in order to guard the road and organise a line of retreat. In *reserve*, behind the Wäldchen, were the Bojan half-battalion of the 3rd of the 37th and cavalry.

At the south-east corner of the Wäldchen, the two

batteries of the Prussian advance guard were firing on the Austrian artillery, which stood west of Schonow and Prowodow, as well as on the infantry masses which were observed in the neighbourhood of those places.

As the cavalry of the advance guard (4th Dragoons) had had no opportunity for intervening, it remained under the fire of Austrian shells between the Wäldchen and the road to Neustadt.

This first act of the day suggests a few remarks. The very brilliant results of the Prussian tactics were undoubtedly due to technical superiority in fire and to an entirely sound utilisation of troops.

First of all we have: one battalion, one battery, four squadrons, holding their own against one brigade (seven battalions) and eight guns.

How did the battalion proceed?

It would have been simple and logical for them to hold their own against a superior attack by relying for protection and resistance on the terrain, by occupying Wenzelsberg church, Wenzelsberg village and some interesting groups of houses. Such cautious tactics would have proved disadvantageous in so far as they would have parcelled out the forces and made leadership, more particularly from the standpoint of fire, very difficult. They would have led to less satisfactory results than the tactics of movement in the open, which permitted the development of all the firing power the troops possessed. The enemy was thus received by a line lying in the open; but as so disposed a situation is liable to be outflanked, the Prussians covered themselves by occupying the woods on both wings. A great help was derived from the advanced state of the crops, which concealed the strength and position of the Prussian troops.

Again, after throwing back the adversary, the Prussian did not pursue him. Pursuing on the close ground they had in front of them would have disorganised their troops and allowed the enemy to reconsider the results obtained.

It equally behoves us to point out how the bold piece of tactics effected by the 2nd battalion of the 37th had been facilitated by troops arriving independently, on its right in the Wäldchen, and on its left towards Bracez,

then in the woods surrounding Sochors. All the commanders of those small units, though little informed and deprived of orders, knew how to initiate undertakings by which they intervened happily in the action.

The front of combat which was taken up at the end of this first act of the struggle was obviously a considerable one in view of the troops available (one brigade, one battery, one cavalry regiment).

Its length from Sochors to the southern outskirt of the Wäldchen was 2500 yards. It was 3700 yards from Sochors to the southern outskirt of Wysokow. Moreover, the half-battalions were mixed up with each other; regiments existed no longer; the officers scarcely managed to reorganise the half-battalions on the ground. The whole reserve available was but one half-battalion.

None the less circumstances explain and vindicate the dispositions taken.

If the whole ground had not been held, the army corps would not have found, on arriving, the space necessary for its deployment. Besides, by thus acting, the enemy was deceived as to the Prussian brigade's weakness.

Artillery goes into action from the start of the affair, the 1st battery begins fighting at the same time as the battalion. When it finds that its position is endangered by the Austrian infantry fire, it withdraws and takes up another position, where it is joined by the 2nd battery of the advance guard; both batteries fight on there without respite, thus increasing the steadiness and the power of the infantry. Cavalry, since it cannot immediately act, remains near by, as a permanent threat to the enemy.

The Use of Fire in this Action

The first attempt of the Austrians was stopped by the fire from the first Prussian line reinforced by its supports.

They again attacked. The attacking body consisted, this time, of certain columns in the 1st line, three battalions in close formation on the 2nd line, plus one battalion attacking in flank. The Prussian battalion was not disturbed by this imposing order.

The firing line proceeded entirely according to regulations, by means of skirmishing fire and short volleys; the flanking troops resorted to rapid fire.

As the enemy continued to advance, the battalion marched on him and fired by command, at a range of only 150 yards, with an obvious effect. The danger to the Prussians was not, however, entirely removed by this brilliant success. An enemy battalion appeared on the flank of the Prussian battalion. The half-battalion on the left turned to the left, in good and close order; then assumed the offensive and compelled the Austrians to retreat.

It is clear that the Prussian battalion had aimed at success and secured success by means of *fire;* everything else: occupation of the "point d'appuis" of Wenzelsberg, etc., cover, utilisation of the pursuit, had been sacrificed to the idea of giving *fire* all its efficiency, by keeping to this end and up to the last moment the whole force grouped and well in hand.[1] The battalion had further utilised:

(1) The weakness of the Austrian formations it had under observation.

(2) The cover provided by the crops.

(3) Of course, the superiority of armament, and the best use to be made of it by means of the formation in line.

(4) But even more, a strict discipline, in close formation, of the troops in action, which had made it possible for the commanding officer to direct the fire effectively up to the last moment.

We clearly discover here the principles and tendencies of the Prussian school in the matter of fire: fire has become with them a power of the first order; it must

[1] The tactics of the 2nd of the 37th Prussian regiment receiving in the open the attack of a brigade would not work nowadays. In the presence of a serious adversary, armed with good rifles and knowing how to use them, one would have to rely on the "point d'appuis" (Wenzelsberg, its two churches, the surrounding woods), and occupy and methodically organise them. But even so the distribution of troops would have to be partly directed by the idea of making it always possible to direct their fire effectively. On those points which command a wide view and allow for efficient fire, the force could not be subdivided beyond the platoon, so that fire should always be in the hands of an officer. That theory and that practice were later more particularly applied by the Prussian troops in the churchyard of Beaune-la-Rolande in 1870.

be fully utilised, and to this end it must remain *at the disposal of the chief*, who must himself be well trained. Mastership in fire, superiority of fire, will be secured, of course, by means of armament, but also and even more by the manner of using armament; which implies that the men have thoroughly practised field-fire and constantly remain under the order of an enlightened commander.

The above instance shows what must be understood by the word *enlightened*. It means a commander possessing a theory of fire, knowing its effects, knowing what means allow us to secure those effects;[1] it also means a commander who then knows when to use skirmishing fire, indiv dual fire, rapid fire, volley fire, fire along the line, etc.; he must also know from experience in what measure and for how long a time his men are capable of supplying the result demanded, of keeping their self-control, of obeying; after what length of time nervous tension and physical fatigue will have to be taken into account; how the men may then be pulled up. He must also know that fire cannot by itself secure a decision; he must, therefore, combine firing and marching, a combination dependent on the maintenance of discipline; he puts a stop to firing in order to march on the enemy, only to resume firing in a still more effective fashion and to complete by bullets the disturbing effect caused by his march.

That desire to develop the whole power of fire is always found in the Prussian infantry of 1870, although as opposed to the French rifle, their armament was then distinctly inferior; their tactics on the battle-field were entirely directed by that preoccupation.

They tried above all to reach a position wherefrom to invest the enemy, to crush him by fire, while the

[1] *For instance:* suppose 100 average riflemen each firing 10 bullets at an objective of a determined nature and size, from a given distance can put 200 bullets into the target; in war, assuming that 20 bullets will hit the target out of 1000 shots, the effect produced on the adversary will prove amply sufficient; one has therefore to fire 1000 bullets on the objective as quickly as possible.

Number of bullets, range, nature of fire: these are the elements of the problem a commander has to solve on each particular occasion.

In order that the men should correctly carry out such a programme, previous training is needed as well as the habit of discipline in action.

real attack was prepared behind that position so as to utilise and develop, when advancing, the superiority acquired.

The position is reached by small, scattered units in the best possible way, more particularly by utilising all covered approaches which the ground provides; the essential object being to arrive on the spot without suffering from the destructive effect of the enemy's arms.

Once the position has been reached, they open an action of fire alone, the direction of which they organise and keep up for the longest time possible, with a view to developing this sort of action to the highest possible degree. Firing lasts as long as is necessary for preparing the attack, a preparation which implies producing certain effects on the adversary as well as managing to bring up at a favourable distance the echelons which have to carry out the attack. The officer directing the fire takes that necessary length of time into consideration and regulates his action accordingly.

Finally, the attack, once started, is mainly carried out by the echelons in the rear, which reinforce and stimulate the firing echelons.

The same care[1] for effectively directing fire in action is found nowadays to prevail in certain German manœuvres. The procedure of a body of infantry may be quoted as an instance among others.

We find here first a very thin and discontinuous line. Behind, at a distance of about 300 yards, a few supports corresponding to the intervals within the line. Three or four companies in all are deployed on the whole front. The remainder of the division follows behind in irregular and almost undistinguishable lines. The echelons (usually companies in line on two ranks) follow each other at a distance of about 500 yards, separated, moreover, by changing intervals.

At about 800 yards from the enemy, the line opens fire and is immediately reinforced by its supports, the

[1] "Another phenomenon of some importance has again been observed since the war of 1870. What I mean is that new principle obtaining among the infantry, a principle according to which infantry is careful *to submit its fire to a more exacting discipline* than in the past, also to accept a scientific direction *in spite of the dispersed order* which itself characterises its modern mode of action."—Von der Goltz.

intervention of which produces one, two, or three bounds forward.

At 600 yards, the line is formed by men in close alignment as a result of the entry into line of other companies; a long interval of time then passes for preparing the attack. The fire develops and reaches an extreme violence; the dispositions of march are condensed into dispositions of attack.

The attack is launched, etc.

So far as the study of fire (which we are following for the moment) is concerned, what do these dispositions show?

They disclose first of all a theory: up to 800 yards, fire produces but a weak effect, and must therefore be resorted to as little as possible; at 800 yards it becomes decisive; an undisputable superiority must then be secured. Their practice follows from this theory: the dispersion and dropping out on the way of men and cartridges must be carefully avoided up to 800 yards. From that moment on, expenditure must be lavish, a *large number of rifles* being thrown together into line: on the other hand, riflemen must be *commanded*, brought up in *companies*, or at least in whole platoons, with a complete set of cartridges.

Such tactics are capable of ensuring the *efficiency*, *duration* and *violence* of fire required, owing to a constant direction given by a *commander previously taught* in training camps to practise the technique of fire and owing to a direction received by *men previously exercised* in these same training camps to practising the mechanism of fire in war.

Thus do exercises carried out in peace time (training camps, grand manœuvres, etc.) prepare troops in the highest degree for performing on the battle-field the act of fighting by fire.

Fire has, indeed, become an unavoidable phase of that action through force called *attack*. You can no longer assault an untouched adversary, as one often did in the old days, by merely appealing to energy.[1]

[1] An action with the arms in use to-day confirms and reinforces the accuracy of Napoleon's saying: "The firearm is everything; the rest is nothing."

As a matter of fact, modern rifles produce important effects up to 1500 yards; guns at a distance three times greater. The "hail of

The strongest moral qualities in troops melt away under the effects of modern arms if the enemy is permitted to let loose his whole power. The attack is unavoidably held up if the critical question, the superiority in fire, is not settled at a sufficient range. For such a superiority alone deprives the enemy of part of his means, shatters his moral, reduces his numbers, uses up his cartridges, flattens him out on the ground, renders him incapable of making a sound and complete use of his arms.

As, however, combat by fire has become an unavoidable necessity, it must obviously be prepared, organised, in time of peace; otherwise it will be impossible to carry it out in war. It will also be necessary to determine what results must be aimed at by fire, and what processes will allow us to reach those results; how firing in action must be commanded; what troops can effect in that regard.

Firing must have its place marked out in the scheme of infantry action. What is that place? This is what we are about to examine.

We may note down at once that this new infantry action cannot be a mere processional and uniform development of the two means infantry has at its disposal: march and fire; and this from a distance of 1200 yards until the enemy is reached. An infantry commander cannot think of conducting the necessary and decisive action by fire with men more or less left to themselves from 1200 yards on; nor can he think of launching an assault with those same men. His formations from 1200 yards on, the expenditure he makes of his forces, must aim at preparing the first

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bullets" sometimes becomes no metaphor but a reality. We have nothing but numerous swarms of skirmishers lying on the ground, forming a continuous line, altogether preventing the enemy from advancing, equally incapable, on the other hand, of putting the enemy to flight by the mere effect of fire.

If, then, the *assault*, attack with the bayonet—in the powerful sense of Souvarow's phrase: "The bullet is crazy, the bayonet alone is intelligent"—always reappears as a supreme and necessary argument in order to complete the adversary's demoralisation by threatening to board him as if he were a vessel, also in order to create fear, which puts the enemy to flight, it nevertheless remains undeniable that superiority of fire is an advantage one ought to secure; first, in order to reduce him, to make it easier to assault him; and secondly, in order to reach the moral level which is required for the assault.

act, namely, *fire action*, and reserve the possibility of performing it, just as they reserve the later preparation and performance of the attack by cold steel.

We thus find that infantry action, having been more or less transformed under the influence of modern arms, subdivides itself into :

(1) Obviously one period of marching, as far as about 800 yards in order to reach the fire position (that is the distance which allows of a fire of a sure efficiency, or the nearest position which may be reached under cover), during which the force does little harm to the enemy, but suffers a serious harm unless it evades it by resorting to :

(*a*) Formation; a weak protection in the presence of modern armament. The less vulnerable formations are still much too risky to make marching possible.

(*b*) Firing very little; such fire, in spite of its slight efficacity, to be capable of maintaining a certain confusion among the enemy, of partly paralysing his means of action.

(*c*) Ground, and such sheltered approaches as the ground may contain. There lies the only really efficient means of advancing in spite of the enemy's fire, for the enemy then ceases to see. From that method may be deduced the formation or formations to be adopted. Such a formation must enable the men to utilise well-reconnoitred approaches; *moreover, in view of undertaking the fire action at an early stage, such a formation must avoid scattering the troops, disorganising them, allowing them to use up their cartridges ; it must transform them into a well-commanded and well-supplied firing machine.*

(2) A second period of fire-action : the object being to secure superiority as soon as it can be effectively secured and kept, that is, from about 800 to 600 yards. Such an achievement requires new faculties on the part of the rank and file and of the commander.

Rank and File : must be capable of undertaking, keeping up for ten, fifteen, twenty, thirty minutes and sometimes more an efficient, increasingly violent, constantly mastered and directed fire.

The Commander : must be aware of the results aimed at, of the technical means of attaining them (nature of fire, number of cartridges, etc.), also of the

practical means of directing troops in action, of employing them; of enabling such troops to last out and produce an effect, and this in spite of physical fatigue, of nervous excitement, of confusion, etc., all of which are disturbing factors which cannot be suppressed, and must therefore be taken into consideration, as they partly determine the manner of employing troops.

(3) A period of attack which we shall study later on.

From the necessity of modern fire-action has resulted the obligation of setting up training camps which alone make it possible to study *the conduct of troops in action* (*fire in war*), *and to give the rank and file a thorough and practical fire-training.*

How the Same Attack would be carried out To-day

(See Sketches E and F.)

In any case, the tactics of the 2nd battalion of the 37th would not do to-day. In the presence of a serious adversary, it would be necessary, as has been stated above, to run up to the "points d'appui" and occupy them if the enemy was not there already.

In case the enemy should occupy them, they ought to be attacked[1] without delay, successively, of course. Then they should be organised in the order in which they are seized.

Let us return to the *attack*. How should it be proceeded with, in order to assault the Prussian advance guard as it was established on June 27th, 1866? How could it put in practice, on the ground leading to Wenzelsberg, the theory of fire and march described above?

Let us assume that troops are ready and assembled at Schonow. What is the object? The object is to drive the enemy from the position he occupies and to take his place. In order to do this, we must go there, and take therefore both a direction and an approach leading thither. It would not do to take any direction or any approach at random, for if we are content to march straight on the enemy, without cover, we shall break

[1] We shall here do well to recall the attack on Daix during the Dijon battle, the attack on Habonville at Saint-Privat, etc.

Krammolna

Lhotker Hof

NACHOD

1165
Plateau de Wysokow

Starkow

Wysokow

Branka

Allstadt

Hauts de Branka

Das Waldchen

Kleny

Eglise de Wenzel

Wenzelsberg

Brauez

Eglise Evang.

Prowodow

Meyer Hof

Sochow

Doukow

Schonow

Rassemblement hypothétique
de la 1ère Brigade.

Echelle au 1: 25000

Kramolna

NACHOD

Stankov

Wysokow

Ustinéves

Ustinéves

Klenny

Wenzelsberg

Provodov

Nachod

Domkow

Schonow

Engagement hypothétique de la 1re Brigade

Echelle au 1:25000

down under a fire from which nothing will protect us, and we shall then either not assault at all or assault badly.

A first thing is therefore necessary: to look out for a number of ways which shall enable us to advance under shelter from that fire: *defiladed* ways, *sheltered approaches.* We so march for the longest possible time, up to the moment when, being in position to use our arms too, we shall be able to treat with the adversary at least on a footing of equality.

Sheltered approaches and ground are always to be found, or almost always, when they are thoroughly sought. In the present case, the ground south of Wenzelsberg contains the hollow roads leading to the evangelical church, then the orchards, then the village, then the large, easily reachable ravine south-east of the village.

In those various shelters we may, by using *various processes,* slip on in small, *single columns,* which should *adapt themselves to the ground;* and we shall thus assemble and accumulate important and untouched forces.

We see here what becomes of *formatiom and formalism.* They vanish because they do not guarantee anything of themselves. Once the result wanted has been determined—namely, an approach as near to the enemy as possible under shelter from his fire—regulations supply the means, changing according to circumstances, of attaining that result: we have the column by sections, the column by companies, the double column, the columns by the flank of subdivisions, etc.; the use of these must be determined in each case with reference to the point to be reached. So long, however, as the troops are progressing in this fashion, they are not able to fight, to receive the enemy properly if he comes on. They must, therefore, be *guarded* from the enemy.

Hence the preliminary *occupation* of the "points d'appui" covering our plans for assembly. These are, here, Wenzelsberg, the triangular wood, the forester's house, Sochors. Thus does the advance guard in action make secure and develop as far as possible the preparation of the attack.

As a matter of fact we may see here the 1st battalion in advance guard occupying at once Wenzelsberg and the triangular wood; the 2nd battalion holding the forester's house, Sochors, the woods near by; in the

rear, the brigade[1] bringing its 1st regiment into the ravines of Wenzelsberg and up to the forester's house; its 2nd regiment assembling north of the Meier farm, and throwing one company into the wood west of Wenzelsberg in order to keep the power of acting in that direction, if necessary.

After we have thus prepared and assembled the attacking forces within the approaches provided by the ground, nothing is done if we do not assault the enemy in order to overthrow him. How should this second phase of the operation be undertaken? We have to march on the enemy, but the ground no longer supplies us with the means of advancing without facing his blows. We must resort to our arms in order to overcome the difficulties of the approach; we must use them to this end under conditions of numbers, of time, and of space, which will enable us to produce on the adversary a greater effect (physical and moral) than he will produce on us. Henceforth it is by fire that we must protect our advance. The force will deploy within the zone of approach and occupy with numerous rifles all the points wherefrom it is possible to fire on the *objective;* the end of this operation produces the *main firing position;* we shall, moreover, give our fire all the development possible so as to create a superiority in our favour.

We have seen above how fire-action should be organised: we should have a line formed of grouped units, as little intermixed as possible, discipline being guaranteed by their interior organisation alone, not their proximity. When under fire, the man in the rank and file obeys the voice of the officers he knows: company-commanders, section-commanders. The line soon turns into separate sets of individuals who cannot be carried forward unless they are led individually and are known by name to their commanders.

The *objective* of the attack must, however, be *determined* beforehand. Taking the same things into consideration, namely, the space to be covered under enemy fire and the superior efficiency which has to be produced and maintained on the selected point of attack, we are led to the following conclusion: the first objective

[1] We suppose here the brigade to include eight battalions, reinforced with artillery and cavalry.

selected must be that point occupied by the enemy which is nearest to us and on which we may apply a numerical superiority, which should guarantee superior efficiency. In the present case, we ought to start from the triangular wood and from the northern part of the ravine so as to attack the wood east of Wenzelsberg: an objective close at hand, and, moreover, weakly held; a salient, easy to envelop and assault with superior numbers using fire alone at first.

The 3rd battalion (covered by the 1st battalion in advance guard, which leaves it more or less entirely to the 2nd regiment to occupy Wenzelsberg) spreads into the northern part of the ravine and starts a fire-action from those points.

It prepares at the same time to carry the wood; therefore to march while maintaining a superiority of fire. Its formation will be a dense line—in any case, a line in close order. Once the wood has been reached, as it may take some time to secure a decision inside of it, that decision is sought simultaneously by a force manœuvring outside the edges of the wood, a force which has been specially organised for that purpose, an echelon which starts by more or less outflanking the wood.

Penetrating into the wood and carrying it (in view of the extension of the wood to be assaulted, and of the distance to be covered before assaulting) is a task which may be performed by the 3rd battalion; it will debouch from the northern part of the ravine, after being organised so as to (*a*) strike first the salient aimed at, an operation which will very likely involve two companies in line, with a third in support in the rear; and (*b*) out-manœuvre the outskirts of the wood and break, if need be, the resistance inside the wood; an operation which will require the 4th company to be in reserve, forming an outflanking echelon on the right. That attack should be supported on the front by the 1st battalion in advance guard, which should operate with certain of its forces by the northern outskirt of the triangular wood and in any case keep the wood engaged.

The attack may nevertheless prove *powerless*, and be held up before having been sufficiently pushed forward: the 4th battalion then advances as a regimental

reserve inside the ravine, so as to be ready to intervene either in order to *reinforce* the exhausted assailants, or in order to carry the attack further once it has been pressed home.

But again, in order that the attack may be successful, it must be *protected* from any enemy surprise, counter-attacks or violent fire, mainly on its external flank. That mission should devolve upon the 2nd battalion (previously in advance guard), which, in order to fulfil it, occupies the northern outskirts of the wood north-east of the forester's house (one company), next the northern end of the ravine, lastly, the small wood touching it (one company), and thus flanks the attack by constantly advancing, without ceasing to occupy " points d'appui " in the rear.

In consequence of this effort, the 1st regiment has to proceed to the north of the forester's house, ready to act all together, though it only sends one battalion into action against the selected objective.[1]

Once the wood east of Wenzelsberg shall have been carried in this way, the possession of it must be made secure by establishing along the northern outskirts an orderly force, under the protection of which the more or less disconnected units which have just made the assault will reorganise themselves; a new objective will then be selected and attacked in the same way, by using the most convenient direction and making a special distribution of forces answering to the new case. It is into such a series of successive actions that combat transforms itself as a consequence of modern armament: the attacking force tries to advance to the right when it can no longer advance straight ahead; it tries to manœuvre by a wing when the other wing is held up; always keeping its freedom of manœuvre by means of preliminary measures of security; always securing on the point of attack the possibility, provided by the

[1] One here sees what becomes of the formation at the moment of attacking; a distribution of forces is then made in compliance with the principles explained above, and according to what is required by the objective and by local conditions. If we now look back at the Austrian dispositions, their faulty nature becomes obvious. The Austrians thought they would secure speed by cohesion; they only secured rigidity; the latter prevented their utilising the broken ground; their march met with nothing but obstacles. Moreover, this arrangement of theirs entirely overlooked *action by fire.*

ground, of applying the numerical superiority which has itself been secured by the art of "creating numbers."

In order to be sure of carrying the wood, our point of attack, we shall apply there all the forces we can assemble —all the *rifles* available. That is obvious, but we must also apply all the guns available. We shall ask the artillery to *prepare the attack*, and therefore to place itself in such a *position as to be able to see.* But the enemy artillery may in its turn observe our batteries, hamper their action and drive them away; our artillery must therefore either take up a position from which it can *see* without being *seen*, or it must gain the upperhand over the enemy artillery. To this end it must possess superiority in numbers.

Had the Wenzelsberg wood been conquered, it would have become impossible for the Prussian advance guard to hold the plateau. The attack on the second position would have then been proceeded with.

After what has now been said, it is possible to define the features of an operation :

First comes the *idea* of a certain *action.* This is derived either from the function assigned to our force, or from the strategical situation as we know it. The idea here was to *attack.* Once the idea of an attack had been adopted, the *direction* had to be determined. The attack had then to be *prepared, carried out, and protected.*

We have seen that the direction must be that determined by the most favourable ground, that is, in the first place, the most sheltered one; next, that over which we can use our rifles and guns together, and in considerable numbers, against a common objective.

As for the three terms : *preparation, execution, protection,* we have seen what they imply.

In any case, *one* offensive action *only* must be undertaken at a given moment, and *not more than one ;* therefore, there must be *one objective only ;* all the forces devoted to that operation, infantry, artillery, cavalry, engineering corps, must send out only such detachments as are strictly necessary for *covering, preparing, ensuring* the operation, that is, for constantly guaranteeing the *main body.* We demand

Freedom of action.
Free disposal of forces.
Strict economy of forces.

Moreover, as a result of this last principle, such numbers must always be attached to the attack as will guarantee an indisputable local superiority; a minimum of forces must, on the contrary, be devoted to parrying, to security, which only aims at a negative result, to wit, protection.

The Infantry Action

(See Sketch D.)

However unfavourable the situation might be (about 10.30 a.m.), Steinmetz ordered General von Loewenfeld to hold the position. The main body, more particularly the artillery reserve, was ordered to march forward more rapidly. But the troops of the Prussian advance guard were exhausted in every way; their situation was very anxious.

On the Austrian side, the Jonack brigade had arrived; it had fallen in south of Domkow, and was about to advance in order to attack the right flank of the position.

At about 9.30, that brigade moved on: the Wasa regiment in the first line; the "Crown Prince of Prussia"[1] regiment in the second line; the Clam-Jallas Uhlan regiment in the third line, under the protection of its own battery established east of Domkow, towards the northern entrance of Schonow. The two Prussian batteries opened fire on these troops at an opening range of 2300 yards.

The brigade advanced with its band leading it, and reached a position north of Schonow at about 10, or 10.15. The 14th Jäger battalion, which had till then covered its march against the enemy, arriving from the region of Giesshübel, placed itself on the right.

At the same time the Rosenzweig brigade fell in, face to Prowodow, and then proceeded to the east of that place, keeping its advance guard (17th Jäger battalion) on the heights between the Kleny road and Wenzelsberg.

At about the same hour (9.45) the Waldstätten brigade received orders to proceed from Skalitz to Wysokow.

At 10.30 the Jonack brigade opened its attack, while the Hestweck brigade was retreating on its right, and while, on its left, five squadrons of cuirassiers were standing on the Skalitz road, at the foot of the heights

[1] An Austrian unit so named.

there. The brigade went forward in the formation we have already described :

The Wasa regiment in the first line, its three battalions on the same alignment, in columns by divisions; the 14th battalion marching in the same formation on the right of that first line; the regiment "Crown Prince of Prussia" in second line, in the same formation. The brigade went towards Wenzelsberg; as it marched by the same route as the Hestweck brigade, it was soon delayed by the flood of fugitives from that brigade; part of the first line was even carried away. As this Jonack brigade was covered neither to the right nor to the left, it was soon attacked by small parties of Prussian infantry who, after debouching from the neighbourhood of the forester's house and of Sochors, fired at the flanks of the assailants.

Spontaneously, the 14th Jäger battalion, then the 3rd Wasa, the 1st Wasa, and the 3rd of the "Crown Prince of Prussia" faced to the right in order to meet that attack, then stood motionless at the foot of the ravines surrounding Sochors. The attack continued, but now with only three battalions.

It was with such reduced forces—but without seriously encountering the enemy—that the brigade arrived at the Wenzelsberg chapel. It undertook from that point of departure an action on the Wäldchen, which was joined by the 25th battalion and the 2nd battalion of the Kellner regiment (which had previously held the northern outskirts of Wenzelsberg), as well as by the 17th Jäger, the advance guard of the Rosenzweig brigade.

Under the pressure of this enveloping attack from six Austrian battalions, the Prussians lost the southern part of the Wäldchen.

Meanwhile the Rosenzweig brigade had started with the Gondrecourt regiment in first line; and the Deutschmeister regiment, making for the western edge of the wood, in second line.

As General Jonack was asking for reinforcements, the 1st and 2nd Gondrecourt battalions supported the left of the Jonack brigade. Thus eight Austrian battalions (17th Jäger, 1st and 2nd Gondrecourt, 1st and 2nd "Crown Prince of Prussia," 2nd Wasa, 25th Jäger and 2nd Kellner) came up and struck that weak outer

edge of the Wäldchen wood, carried it and carried the wood itself, which is of an average width of 300–400 yards and of a length of 1300–1400 yards. They were bound to lose themselves in it without securing any important result.

The remainder of the Rosenzweig brigade (2nd Gondrecourt battalion and Deutschmeister regiment) reached, a short time later, the south-western edge of the wood, where the brigade battery was also coming up. These battalions, marching in the direction of Wenzelsberg church, struck against the 2nd battalion of the Prussian 37th. The latter received them with a very violent fire, which stopped not only the skirmishers but the 2nd and 3rd battalions as well. It was, however, outflanked in its turn by the 1st Deutschmeister and by detachments debouching from the Wäldchen.

It then withdrew without delay on the Branka-Wald, facing round more than once and delivering volley-fires; it was received and protected in its retirement by one half-battalion (Bojan of the 3rd of the 37th), which attempted to counter-attack; and one half-battalion (Suchodoletz of the 58th rifles), which had come up from Altstadt and had established itself at the western outskirt of the Branka-Wald.

The Prussian artillery and cavalry could not hold on further. They withdrew behind the Branka-Schlucht.

The retreating movement of the centre determined the same movement among the detachments at the forester's house and at Sochors; they slowly withdrew towards the Branka-Wald. No attack had been made on Wysokow. The whole Prussian advance guard was *in action*, and was *beaten;* but the hour was *nearly noon*. It had only to hold out for a short while longer.

The infantry being disorganised, cavalry was called upon to continue the fight.

The assailant had availed himself of his success to overrun the approaches to the Neustadt road; he must be stopped at any price.

The Cavalry Action (11.30 a.m. and 12)

The ground between Wysokow and the Wäldchen contains a road lined with trees which, going from Wysokow to the Branka-Wald, follows the ridge of the

Croquis D

Kramolna

Lhothier Hof

NACHOD

1165
Plateau de Wysokow

Starkoc

Wysokow

Alstadt

Haut.rs de Branka

Das Waldchen

Kleny

Eglise de Wenzel

Wenzelsberg

Prowodow

Eglise Evang.

Mon Joyeux

Meyer Hof

Nachorz

Domkow

Schonow

Engagements
entre 11.h½ et midi.

Echelle au 1: 25000

2 Kil

slopes, at the foot of which are meadows. These slopes are cut by hollow roads and ditches, and are covered with crops and a few small woods.

Meanwhile, the Wnück brigade, hastily called up, has gone through Nachod (10.30). It reaches the Neustadt road and takes up a sheltered assembly position behind the ridge. It has formed in lines of column by squadrons, 1st Uhlans on the right, 8th Dragoons on the left. One platoon of dragoons patrols ahead. One squadron of dragoons is scouting beyond Wysokow; it soon withdraws before the superior forces of the Austrian cavalry. This is the moment when the Prussians are thrown back from the Wäldchen. The battery of the Wnück brigade takes up a position near the Neustadt road.

Opposite that place, the Solms cavalry brigade holds the front of the meadows west of Wysokow; it is near the bridge of the road.

The battery of that brigade attempts at first to take position between Wysokow and Kleny and to cover the ground with shells. It then advances as far as the farm-steadings at Wysokow without succeeding in taking up a position. It does not produce any effect whatever.

General Raming orders General Solms, after the 17th Jäger battalion has entered Wäldchen, to advance on the plateau so as to cover the left flank of the Austrian infantry. It was about 11.30 when the squadron of Prussian dragoons (2nd of the 4th Dragoons) was withdrawing before the Austrian cavalry and sending in the news of the enemy's cavalry advance to the Prussian infantry at Wysokow (Kurowski's half-battalion of the 3rd of the 37th) and to General von Wnück. At the same time, General Solms learnt from his patrols the presence of a regiment of Prussian Uhlans on the plateau.

The Austrian cavalry, with the railway on its left, has its squadrons of cuirassiers presented as follows at the outset of its attack:

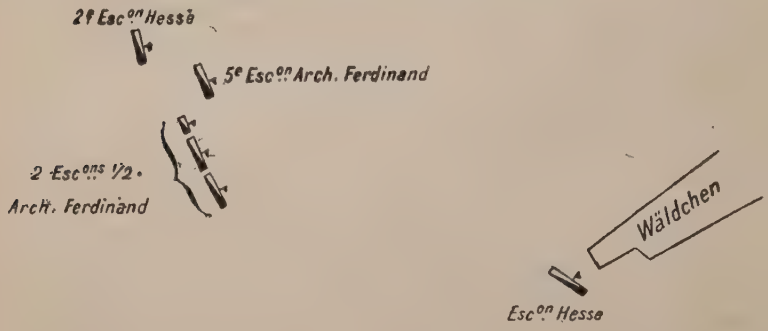
First of all the 5th squadron of the Archduke Ferdinand regiment, advances alongside of Wysokow, debouches from the steadings, faces to the right and charges; then General von Wnück orders the regiment of Uhlans to advance at once and deploy at a trot; the 1st squadron of Uhlans attacks on the front; the

2nd squadron of Uhlans attacks in flank, followed by three platoons of the 3rd squadron.

The encounter takes place at the southern outskirts of Wysokow and near the eastern exit of the village.

The 2nd squadron of (enemy) Hessen cuirassiers sees the affair, hurries forward, and throws itself into the fray, when the 2nd squadron of the 4th Prussian Dragoons arrives and attacks in its turn, debouching from the eastern exit of Wysokow. In all, two squadrons of Austrian cuirassiers are now opposed to three and three-quarters Prussian squadrons.

The fight was a very confused one. In spite of their numerical inferiority, the Austrian cuirassiers fought vigorously; at each repulse, they fell back



again into line and attacked again. But here a certain incident took place.

Having heard from the 2nd squadron of the 4th Dragoons that enemy cavalry was approaching, the Kurowski half-battalion (of the 3rd of the 37th) had advanced towards the eastern part of Wysokow and went quickly up the slope south of the village; the half-company of Jägers, which was at that moment occupying the middle of the village proceeded at once to its southern outskirts.

The Kurowski half-battalion had not completed its operation when the Austrian charge was launched. The Prussian half-battalion ran up to the ridge, for it as yet could see nothing. There it formed square, and with its head and left face fired on the mass of the Austrian cuirassiers as they attempted to reform on

the foot of the slope. The latter turned on their new adversary. They were routed and repulsed. They next came under the fire of the half-company of Jäger and retreated for good and all.

The decision in this cavalry action was undeniably due to the intervention of the Prussian infantry, who had had the wit not to miss a good opportunity. It was a fine triumph of solidarity between different arms, of the initiative of commanders of small units; a brilliant manifestation of the warlike activity that can permeate an army which military science vivifies and inspires.

General von Wnück, ignoring the presence of Prussian infantry at Wysokow, believed the village to be occupied by enemy infantry. He gave the signal for assembly. He did not carry out a pursuit.

At the same time, however, a combat was taking place near the Wäldchen.

The two and a half Hessen squadrons placed, as we have seen, on the right on the Austrian line, followed in echelon, advancing through the depression of ground which lies west of the Wäldchen and rises towards the north-east. The commander of the 4th squadron of Uhlans had scarcely noticed this movement, when the Austrian squadrons suddenly deployed at full gallop and charged. The captain faced the attack with his squadron and two platoons of the 3rd squadron by a half-turn to the left.

The encounter took place near the north-eastern edge of the Wäldchen.

The Prussian Uhlans were enveloped by the Austrian cuirassiers; being hard pressed, they could not use their lances. Part of them were thrown back at once on the Neustadt road.

The situation of the Prussian Uhlans was already critical when the 3rd squadron of Hessen cuirassiers, which, having been attached to the Rosenzweig brigade, had placed itself behind the Wäldchen, intervened in its turn. It went along the outskirts of the wood and threw itself on the flank of the Prussian Uhlans.

General von Wnück rode over to the 8th Dragoons, which then advanced towards the north-eastern edge of the Wäldchen and attacked the Hessen cuirassiers, neglecting altogether the fire from the wood.

The 1st and 2nd squadrons attacked in front, the 3rd and 4th outflanked and enveloped the right of the Austrians. A second mêlée ensued; the Prussians prevailed owing to their enveloping movement and numerical superiority (five and a half squadrons against three and a half). The Austrian cuirassiers withdrew slowly. The Prussian Uhlans came back behind the ridge.

Owing to the heat of action inside the Wäldchen, the Austrian infantry were not aware of the cavalry action which was taking place within their reach; they did not intervene; they did not show the happy initiative displayed by the Prussian infantry at Wysokow.

General von Wnück had not a single reserve left. He knew that the Wäldchen was occupied by the enemy. He also believed Wysokow to be in enemy possession. He feared lest he should come against fresh and numerous enemy forces. At the moment when he had appeared on the battle-field, the fight was raging on the whole front; the main body of his army corps was approaching. He cautiously decided to assemble his brigade and to abandon the pursuit.

Such, at least, are the reasons which he himself put forward later on (while claiming victory) in order to justify his timid conduct.

The Solms brigade was assembling west of Wysokow; it withdrew later on in the direction of Kleny; it was not to reappear on that day.

The Prussian brigade resumed its original position. Later on, the fire from the Austrian artillery compelled it to withdraw behind Branka.

Attack by the Austrian Infantry on the Branka Wood–Neustadt Road Position (Noon)

At about the moment when the cavalry actions we have just been studying were taking place, the Austrian infantry was attempting to debouch from the Wäldchen in order to attack the Branka wood and the road to Neustadt.

The enemy's fire easily succeeded at first in breaking up these desultory efforts. Moreover, the Prussian half-battalions, Bojan (of the 3rd of the 37th) and

Suchodoletz (of the F. of the 58th), which had hitherto been kept in reserve, sallied forth from the outskirts of the Branka wood and enveloped with a circle of powerful fire the two Austrian battalions (1st, 2nd of "Crown Prince of Prussia") which had succeeded in debouching from the north-eastern corner of the Wäldchen, as well as the 17th Jäger. As that fire proved insufficient, both Prussian battalions made a bound forward of 350 paces, and twice delivered a volley at a range of 350 yards. At the same time, General von Wnück ordered the 8th Dragoons to hold up the infantry debouching from the Wäldchen. Hence resulted a series of cavalry attacks against the Austrian Jägers and against the battalions of the "Crown Prince of Prussia" regiment.

Those companies of the Austrian 17th Jäger battalion which were not in action immediately withdrew into the Wäldchen. The others formed square in order to resist the cavalry charges, but they suffered considerable losses at the hands of the Prussian half-battalions (Bojan and Suchodoletz). Being compelled to deploy in order to resist, they were charged and soon thrown back into the wood.

The two battalions (1st and 2nd) of the "Crown Prince of Prussia" regiment and the fractions of the 25th battalion and of the 2nd Kellner, which tried to support them, met with the same fate. A flag was lost.

The Bojan half-battalion (of the 3rd of the 37th) availed itself of this success to throw itself into the Wäldchen; it was at once supported by the first troops of the main body of the army corps which had arrived at last (half-battalion of the F. of the 44th), and had already intervened in the action against the Austrian 17th Jäger.

During this fight the Rosenzweig brigade had sent its reserves into action (1st and 2nd battalions of the Gondrecourt regiment) through the region south of the Wäldchen, against the position on the road to Neustadt. The repeated attempts of the Prussian cavalry, generally confined to making an advance menacing that road, compelled these battalions also to form square. As a matter of fact, they suffered little from the cavalry action; they broke down, however, under the direct fire from the outskirts of the Branka

wood, as well as under the flanking fire coming from all sides. The same thing happened to the battery of the Rosenzweig brigade, which had tried to take up a position in front of the Branka-Wald.

At 12.30 the space between the road to Neustadt, the Wäldchen and Wenzelsberg, were being evacuated by the Austrian infantry. The attack on the left wing, carried out by the Jonack and Rosenzweig brigade, and supported by part of the Hestweck brigade, had failed. All the progress of the Austrians had been stopped before the second position by the combined action of enemy infantry and cavalry. No attempt had been made against either the right wing or the left wing of the Prussian advance guard.

The critical phase for the Prussian Army Corps had come to an end. The battalions of the main body were beginning to deploy on the plateau. The Austrians had no more fresh troops at their disposal save the Waldstätten brigade, the artillery reserve and the Schindlöcker cavalry brigade. These troops, however, could still come into action. A vigorous counterstroke might still throw back the head of the Prussian Fifth Corps on to the pass. But it was little likely that, where three Austrian brigades had failed before a weak advance guard, one brigade and a few demoralised troops, would succeed in reversing the situation.

Remarks on this Phase of the Battle from 10.30 to Noon

Concerning that part of the battle conducted by General von Raming a certain number of remarks are called for :

(*a*) At the moment when that General took over the direction of the affair, the Hestweck brigade was beaten, the Jonack brigade was about to come into action. The Rosenzweig brigade had nearly reached the battlefield. The Waldstätten brigade and the artillery reserves were still in the rear at Skalitz.

Such a dispersion of the means of action was obviously adverse to strong action. It would be still worse to aggravate the evil. As all the forces could strike together, the worst policy would be to launch

them piece by piece into action. Moreover, General von Raming could not ignore what had just happened :

The Hestweck brigade had suffered heavy losses and was in full retreat; the enemy had discovered himself on a front of 3000 yards; the Austrian artillery had proved inferior; and the Prussian cavalry had discovered several squadrons.

How, then, should he attempt to initiate with one brigade a new action against an enemy whose spirit had just been enhanced? He should not have undertaken to fight again, save with all his forces acting together.

To utilise the remains of the Hestweck brigade, to throw in the Jonack and Rosenzweig together, to build up a reserve with the Waldstätten brigade summoned as quickly as possible by the Skalitz road : such were, on the whole, the dispositions he ought to have taken.

How must the troops be made to attack? He had just seen the results of a fight conducted on one front, without manœuvring. A wing manœuvre had obviously to be organised at the same time as a frontal attack.

On which wing was it best to act? On the most advantageous one—namely, that one which should first of all allow the attack to develop to the best advantage, and which afterwards should ensure the most decisive result. Those two conditions were to be found in the direction of Wysokow-Altstadt. This is clear when one examines the map and studies the ground.

There was ground practicable for all arms in the region north-east of the Wäldchen. There was no other obstacle than Wysokow. A great number of ways of access enabled the attacking party to approach that village and the region to the north of it.

As for the final result : an attack by the north of Wysokow, over the interval Wysokow-Altstadt, would take the enemy front in reverse, foil all the attempts of the adversary, however successful at first, on the Wenzelsberg plateau, and definitely bottle up the Nachod pass.

On that basis, the plan might have consisted in :

Entrusting the Hestweck brigade with the task of occupying Wenzelsberg and the villages more to the south; pushing on the Jonack and Rosenzweig brigades

over the interval Wäldchen-Wysokow and north of Wysokow; preparing that attack with all artillery available; protecting it to the north by a main body of cavalry; and bringing up the Waldstätten brigade in reserve at Kleny.

In any case, the attack had to avoid the Wenzelsberg region, which, being woody, and broken up, would compel the attacking force to parcel itself out, to subdivide itself into powerless and necessarily disconnected efforts; a region where numerical superiority would not be able to assert itself.

In order to justify his attack across the Wenzelsberg plateau, General von Raming has alleged that he did not know whether the Prussian attack was directed against the road to Neustadt, or against Skalitz, or the Wenzelsberg road; as if any manœuvre should consist in simply countering the attempts of the enemy!

Every manœuvre must be the development of a scheme; it must aim at a goal. The goal was, in this case, to bottle up the Nachod pass. Therefore the Austrians ought to have taken the direction that would have led to this end in the easiest and most secure way, and only to have arranged all their attacking dispositions in the light of, and consequent upon, that end.

(*b*) The Jonack brigade went into action without reconnoitring the position and situation of the enemy. It presented a thin line of skirmishers, followed by battalions in close order, unable to manœuvre; it advanced over the very ground where the fugitives from the Hestweck brigade were flowing back. It was not guarded on its right flank. It left its cavalry in the rear; its artillery supported it only from a very great distance. The ends of its line were more or less carried away by the fugitives. In order to parry a counter-attack, about four battalions took a divergent direction. Numerical superiority vanished. Not a single shot was fired; out of seven battalions, three only henceforth take part in the attack.

(*c*) One has also to notice the way in which the 25th Jäger battalion joined the Kellner battalion in attacking the Wäldchen; for by deserting Wenzelsberg, the only "point d'appui" available, that battalion exposed the village to being taken by enemy, had the latter not

been prevented from doing this by his temporary numerical inferiority.

(*d*) In the attack on the second position, there is neither a superior direction, nor unity and harmony; there was not one united striking force. How could it be otherwise? *Eight* battalions attempt to debouch from the eastern outskirts of the Wäldchen. That edge of the wood is not 400 yards long. More to the south, the reserve comes up by mere chance, in compact mass formation, in front of the Neustadt road. No scheme directs that reserve; it acts blindly and without liaison. Had it been better conducted, the Austrian attack would have succeeded.

What would have been the results on later general operations?

The Fifth Prussian Corps would not have managed to debouch from Nachod if it had been definitely thrown back. If one observes that, on the same day, the First Corps suffered a severe check at Trautenau, the entrance into Bohemia would have been rendered impossible to the Second Army. What would then have become of General von Moltke's plan? Let us acknowledge once more that strategy, however brilliant it may be, is at the mercy of tactics.

(*e*) As far as the cavalry action south of Wysokow is concerned, both parties have claimed victory. Both may be right, if that action be only considered in itself. As a matter of fact, the Austrian cavalry was proved to possess dash, manœuvring efficiency, undeniable professional value. But they were not commanded. The Prussian cavalry were more cautious, less well trained: they had the same pluck, the same quickness, the same versatility in manœuvring. But they were commanded. They showed tactical ability. If we only consider the *result*, it was they who obtained the victory. Two cavalry forces do not fight in order to find out which is the best of the two. There is always a general situation to be considered, a tactical goal to be reached. For the Austrian cavalry, as well as for the Austrian infantry, the object here was to reach the approaches of the Nachod pass. They failed to do so. For the Prussian cavalry, as well as for the Prussian infantry, the object was to protect that issue. They secured that result.

Among other mistakes, the Austrian cavalry were

faulty in omitting to scout, to protect themselves in the direction of Wysokow; hence a decisive surprise. The general use made of cavalry by both parties leads to a similar remark. General Steinmetz had his whole cavalry (about twelve squadrons) on the battle-field. The Austrian commander, who had more than thirty squadrons at his disposal, only managed to send five into action. He had numbers on his side; yet it was by numbers that his cavalry were beaten.

The Arrival of the Main Body of the Prussian Fifth Corps and the Austrian Waldstätten Brigade

(See Sketch G.)

The Fifth Army Corps had left its bivouac at Reinerz at 5 a.m.; it had halted near Gellenau at 8, had resumed its march at 9, and had received at that moment a new order to hasten in the direction of Nachod.

There was nothing peculiar in this marching order, save that the artillery had been distributed by batteries all along the column.

The bridges on the Mettau had been repaired and two others had been built; they had all three to be passed with care, which markedly delayed the march of the column.

General von Kirchbach, commanding the 10th division, had forestalled the column on the field of action; he had found his way, and had witnessed the loss of the Wäldchen and the cavalry action.

As soon as his troops arrived he ordered the general commanding the 19th brigade to retake and occupy the Wäldchen, while himself he proceeded to Wysokow, which the commander of the army corps had ordered him to occupy. In consequence of this decision one half-battalion of the F. of the 46th was soon seen marching on the Wäldchen at the moment when the 8th Dragoons was charging and when the Bojan half-battalion was again beginning to attack. It was followed by the 2nd of the 46th, which, with the Bojan half-battalion, penetrated into the Wäldchen, from which they drove the Austrians out.

The remainder of the 46th advanced, under the

Croquis G.

Situation
vers Midi ½.

protection of these troops, behind the Wäldchen, while the general commanding the division directed the remainder of the 19th brigade, that is, almost the whole of the 6th regiment, on to Wysokow.

His first idea was to bring up the 20th brigade to that point (Wysokow). He feared, however, lest he should not have the time to do it; concentrating on his most urgent task, he sent there nothing more than the 6th regiment. In the Wäldchen, the Prussians reached the southern outskirts and carried Wenzelsberg church.

The retreating movement soon extended to the Austrian centre and the right, although the latter had not been attacked by the Prussians.

After half an hour's fighting, the Rosenzweig and Jonack brigades left the ground of the Wäldchen, at Sochors, which had been so hard to conquer.

While that action was taking place (at about noon) around the villages on the western slope of the plateau, and while the crisis was ending in favour of the Prussians, the Waldstätten brigade arrived on the Austrian side and fell into line astride of the Skalitz road.

At the same time, the Austrian artillery reserve, with two batteries of eight on the south, three batteries of four north of the road, was coming into action; it opened a very efficient fire, with its forty guns, against the plateau; it made it very difficult for the Prussian batteries, arriving one after the other, to take position, and for the enemy infantry to advance. The Wnück cavalry brigade was compelled by this fire to withdraw as far back as 500 yards east of Wysokow, near the road. Moreover, also owing to this fire, it became possible for the retreating Austrian infantry to rally and assemble at ease near Prowodow and Schonow.

After having left its position by the Wenzelsberg church, the battery of the Rosenzweig brigade reappeared on the heights north of Domkow.

When General von Raming saw from his position ahead of Kleny, on the main road, the retreating movement of the Jonack and Rosenzweig brigades, as well as the Prussians arriving on the western outskirts of the Wäldchen, he ordered the battalions of the Waldstätten brigade nearest to the road (2nd of the Hartmann regiment and 3rd of the Franck regiment) to attack that edge of the wood.

The 2nd Hartmann marched on the north-western end of this edge, providing a rather dense line of skirmishers, which was followed by a line of columns; it was supported in second line by the 3rd Franck battalion.

The Prussian half-battalion which occupied that part of the edge of the wood, received the 2nd Hartmann battalion with a violent fire, threw back the skirmishing line on to the columns behind it, and also repulsed these in their turn. Not content with this, it advanced into the ravine which leads to Prowodow and resumed its violent fire against the 3rd Franck battalion, which was still advancing. The same result followed. All the neighbouring Prussian companies entered the action successively. The whole Prussian line soon reached the hollow of Schonow and of Prowodow, where it halted, by order, it is said, of the brigade commander.

While the 19th infantry brigade was coming up, the Prussian artillery of the main body was trying to unlimber between Wysokow and the Wäldchen, being partly protected by the Wnück brigade. This attempt broke down before the powerful action of the forty Austrian guns.

At about noon, a first battery made its appearance, then withdrew; fifteen minutes later, a second one met with the same fate; three-quarters of an hour later, a third. Two others arrived later on and succeeded in establishing and maintaining themselves, but only near Wenzelsberg church.

The success of the Prussian artillery went no further than this establishment of the two last batteries, though the three first batteries ended, much later, in establishing themselves between Wysokow and the Wäldchen after the Austrian artillery had been removed for use elsewhere.

Envelopment of the Prussian Right Wing by the Main Body of the Austrian Waldstätten Brigade; the 20th Prussian Brigade comes into Action

(See Sketch H.)

At 1 o'clock, General von Raming ordered General Waldstätten to attack Wysokow. The latter had advanced along the road with the main body of his

Attaque de Wisokow
par la Brig.me Waldstatten

Echelle au 1:25000

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brigade (before the attack made on the Wäldchen by two of his battalions), and had then turned to the left so that he arrived at 1.30 on the low ground between Starkoc and Wysokow.

By order of General von Raming, three batteries of the artillery reserve made for the height north of Wysokow, in support of the Waldstätten brigade, while the 11th Cuirassiers advanced in the direction of the same height in order to envelop the Prussian right.

The village of Wysokow is built on a length of 2000 yards, along the road from Branka to Skalitz. It is drawn out in a rather steep ravine, with rugged sides, the southern side commanding the northern one. The two ends of the village contain a greater number of houses than the middle.

The ground south of Wysokow is entirely different from the ground in the north. The Wysokow plateau here commands the whole country, takes the Wenzelsberg plateau in flank, and holds Nachod and Altstadt under its fire. It is easily defensible against attack from the east.

The importance of the Wysokow plateau on the day of the fight had escaped the attention of the Austrian General Staff; an astonishing thing—because, from the east of Kleny (where the staff was), the view is most striking.

If the object was to prevent troops from debouching from Nachod, then the heights south of the road or the heights north of it ought to have been seized. The northern heights were preferable, because by them one arrives more quickly on to the Nachod road and one commands Wenzelsberg.

In any case, General von Raming's order was that Wysokow must be attacked and the Prussian right wing enveloped. General Waldstätten disposed for this attack of four infantry battalions (6th Jäger, 1st Hartmann, 1st and 2nd Franck), of the brigade battery, of three batteries of four from the artillery reserve, and of one regiment of cuirassiers.

First of all the brigade battery arrived on the Wysokow height, protected by a Jäger detachment; then an enemy battery from the artillery reserve established itself on the Wysokow plateau, and later on another one near the road; finally, the remaining half of one battery

took up a position on the hillock near the railway; the regiment of cuirassiers fell into line on the right of the battery and a half.

On the Prussian side, General von Kirchbach had observed the Austrians moving in a northerly direction; he perceived the danger menacing Wysokow. He understood that the two battalions occupying the village had not the strength to hold it. He called the 20th brigade up to that point.

This brigade had been considerably delayed while crossing the bridges over the Mettau; it had arrived too late on the plateau; it had been sent to the rear of the Wäldchen in order to form a reserve. Moreover, two of its battalions had been kept in reserve at Altstadt by a definite order of the Crown Prince, and a third battalion was following the batteries congested at the crossing of the Mettau, so that the brigade brought on, at first, only three battalions (1st, 2nd of the 52nd, F. of the 47th). It was while they were in that condition that the same brigade was recalled from its march on the Wäldchen, and ordered to proceed to Wysokow; it arrived there too late to meet the first undertakings of the attack.

This attack was carried out at about 2 o'clock; when it struck the Prussian troops they were distributed as follows:

At the western end of Wysokow, one and a half companies of Jäger, two companies and a half of the 6th; in all the equivalent of one battalion; in the middle of the village, about one battalion was holding the road and the Wysokow height; at the eastern end, half a battalion. A battery of four tried to take position north of the village; it did not manage to hold on there for more than half an hour.

The Austrian attack developed against the western end and the middle of the village. The 1st division of the 6th Jäger battalion utilised the deep cutting leading to the north of the Wysokow height and advanced against the north-western outskirts; a few detachments arrived in the village itself as a result of having been able to march under cover.

The 2nd and 3rd divisions of the Austrian 6th Jäger battalion deployed and attacked more to the north, enveloping the Prussian right. At that moment,

General Waldstätten ordered his three other battalions (1st Hartmann, 1st and 2nd Franck) to advance, partly against that part of the village which had already been overrun, partly more to the east.

The Prussian situation was most critical. Fortunately General von Wittich, commander of the 20th brigade, arrived and immediately sent for the three battalions mentioned above (1st, 2nd of the 52nd, F. of the 47th).

The general commanding the division ordered him to cross Wysokow, to make for the heights on the north, to form there and attack the enemy so as to throw him back. He was informed at the same time that the Wnück cavalry brigade would cover his right flank. One battalion (1st of the 52nd) was, however, devoted to reinforcing the body occupying Wysokow.

There remained then, for counter-attack, two battalions covered by the Wnück brigade. The ground on the plateau was unfavourable to infantry and even more so to cavalry.

Captain Hoenisch, divisional adjutant, who has been sent to reconnoitre that ground and to direct the cavalry had found (and reported to General Wnück) that it would be difficult to overtake the enemy battery on the height north of Wysokow by surprise. In order to meet this difficulty, the 3rd and 4th squadron of the 1st Uhlans were detached and tried to reach the left flank of the enemy by defilading behind a rise of ground. Then, as they found that the regiment of Austrian cuirassiers was withdrawing, leaving only two platoons to support the battery, and also that the Austrian gunners were limbering up their guns, they attacked and charged both the supporting platoons which had been left by the cuirassiers. The Austrian cuirassiers took to their heels, the Uhlans captured three guns, six limbers and three ammunition wagons.

While this manœuvre was in preparation, the counter-attack supplied by the two battalions advanced on two lines: F. of the 47th in the first line; and the 2nd of the 52nd in the second line. They marched to the west, reposing on the northern outskirts of the village, and struck the Austrian attacking columns on the left flank. As, however, the counter-attack was immediately threatened and taken in flank by the Austrian cavalry and artillery on the Wysokow plateau, the two half-

battalions on the right, while continuing to advance, faced to the right with their wing companies. The Austrian cavalry did not attack. The companies then directed their fire against the Austrian artillery (one battery and a half). At the same time the latter received the fire of the Prussian guns. Moreover, the Austrian regiment of cuirassiers was withdrawing at that moment by order of its divisional commander, leaving, as we have seen, only two platoons in support of the artillery. The batteries then judged that they could not hold further; they were just limbering up, when the 3rd and 4th squadrons of Prussian Uhlans suddenly appeared and charged with five of their platoons the two platoons of Austrian cuirassiers and with the three others, the batteries; the two battalions, which were continuing the attack, had thrown the Austrian brigade battery, established on Wysokow height, into complete disorder by their fire. They put twenty-eight horses and fourteen men out of action, and only allowed the gunners to remove three guns and five limbers.

Although the Prussian counter-attack had been compelled to weaken itself in view of these actions on its flank, its effect on the Austrian attack was a decisive one. The latter was thrown back in the most complete disorder. Those of the Austrian fractions which had penetrated into the village were still holding on at the western end. But the counter-attack, continuing its enveloping movement, succeeded in taking them in reverse, while, on their striking front, they came up against the defenders of Wysokow; disorder and retreat set in everywhere. The Austrians had definitely failed in their last effort.

General von Wittich ordered his battalion to assemble and pile arms on the hill, while the Wnück brigade, supported by the lately arrived last battalion of the 52nd (F. of the 52nd) carried out the pursuit by order of General von Kirchbach.

The troops which had performed the assault were immediately collected and taken again in hand; it was a *fresh* force (F. of the 52nd) which went into action with the cavalry on a *new* undertaking, to wit, the pursuit.

The King's Grenadiers, the last regiment of the army corps, arrived at that moment.

As for the Prussian artillery, it had at last brought into line the greater part of its guns and somewhat reduced the power of the enemy guns. After successive and inefficient efforts it was only when the reserve artillery had come up that all the batteries, acting simultaneously, could take up their positions, and even then, not without difficulty. To mention but one instance: the battery marching at the head of the artillery reserve had lost sixteen men and eighteen horses before it could unlimber.

The Fifth Prussian Corps bivouacked on the ground of the action; by evening, its outposts extended from Kramolna to Wysokow and from there to the road to Neustadt (one post at Stackoc).

The Fifth Austrian Corps had lost { 225 officers; 7275 men (including 2500 prisoners).

A few remarks remain to be made on the conclusion of that day.

1. The Prussian cavalry stayed in action right up to the end. After breaking the attempts made by the enemy in order to debouch from the wood, they attacked the enemy artillery, captured three guns, and afterwards carried out the pursuit. Although their professional value was inferior to that of the Austrian cavalry, they knew how to fulfil their mission in the battle, how to act in compliance with the advance guard's tactics; above all, they were handled by a commander who utilised them to the utmost right up to the end.

2. The Austrian artillery had also proved very superior to the Prussian artillery in armament, in tactics and in training; they were, in consequence, superior in their fire. They inflicted on the successively arriving Prussian batteries losses which prevented the latter from keeping up the struggle. In spite of that, the Prussians conquered at the end of the day. Artillery action is not, then, any more than cavalry action, of such a decisive value as to settle finally the result of a battle.

In the future we shall frequently see artillery action remain indecisive, on account of the range and of the difficulty of observation with smokeless powder. Should we check our attack, for that reason, until our artillery has secured an undisputable superiority? Obviously not.

3. The actions around Wysokow show what conditions of ground are required for attack. The Austrian attack penetrated into the village because it was strongly supported by artillery, that is undeniable; but also, and above all, because it had at its disposal covered avenues of approach, defiladed ways of access, which brought the attacking forces under shelter from enemy fire up to 300 or 400 yards from their objective. A sound attacking direction is one which provides covered approaches for infantry, and which makes it possible to use both arms (artillery and infantry) against a common objective, with that full development of the means of action which is derived from numerical superiority. The attack finally failed because it was not *guarded*. It will always be so. Any force that starts attacking must *cover itself* in all directions by which the enemy may come on. The troops entrusted with that function must occupy, on the flank of the attack, the points whence a surprise fire might be delivered, as well as locate and receive the counter-attack which is bound to take place.

4. The defence of any place consists, as we have seen, in parrying the attack by means of the resistance supplied by the organised and occupied "points d'appui," and in *thrusting* by means of counter-attack in order to finish off the adversary. To give up counter-attacking would be equivalent to returning to that passive defensive which excludes decision and always ends in disaster.

Counterstrokes starting from a "point d'appui" cannot find an outlet within the circle of fire which surrounds the position and makes its approaches impassable.

In order that the counter-attack may strike home, it is further necessary that it should be *guarded*, as has been prescribed for the attack; otherwise it is liable to be *surprised*, and therefore *delayed*.

For instance: the two half-battalions of the 47th and 52nd were compelled to face the Austrian artillery (one battery and a half) and cavalry (11th Cuirassiers).

5. The distribution of troops devoted to the defence of a place includes a garrison, an occupying force, numerically as weak as possible; a reserve as strong as possible, designed for counter-attacking and for providing itself, at the moment it goes into action, with a security-service which will guard it from any possible surprise.

The occupying numbers may be calculated on the following basis : at the moment when the enemy reaches the outskirts of the village, we oppose him with one rifle per yard to make resistance serious and adequate. The enemy can generally assault only one side, the outskirts of the village. It is only after measuring that part of the outskirts and organising a central redoubt, that the numbers of the force attached to the direct defence of the village must be fixed. At Wysokow, the force devoted to this task was the equivalent of three battalions.

This calculation must never lead to our devoting to the occupation of the " point d'appui " the whole force available, however weak that force may be; part of it must always be kept in reserve for the counter-attack.

6. With modern arms, of which we have seen the full power on the ground of Nachod, the Austrians suffered their heaviest losses when they retreated after an unsuccessful attack, or when they abandoned a position they had lost. It was less costly to them either to advance in attack or to keep on the defensive. Hence the two principles which command modern tactics : *any attack once undertaken must be carried home ; defence must be supported with the utmost energy ;* those are the most economical policies. These principles must prevail in practice; they make it, moreover, absolutely imperative for the directing mind, the commander, to know, to foresee and to solve the difficulties which the attack is bound to meet; not to undertake any attack that cannot be carried home, that cannot be *organised* and *brought up* under cover, *prepared, supported, guarded* up to the last moment.

7. The 2nd battalion of Prussian 37th which had stood its ground alone against a large part of the Austrian efforts had particularly checked these efforts by its fire during the whole morning. It fired 32,000 cartridges. This meant an average of thirty-two cartridges per man. We see, then, that considerable results may be secured by consuming a relatively small and easily provided quantity of ammunition, provided the fire is well directed.

CHAPTER VIII

STRATEGICAL SURPRISE

We have found that the notion of security rules tactics in a sovereign way; we have seen that it commands in an undeniable manner the conduct of troops, either when a manœuvre has to be *informed by scouting*, or *guarded*, or when the means of action have to be *prepared* and *assembled*, or again when those means have to be *applied* on a reconnoitred objective. The same notion reappears in the forefront of the considerations on which strategical dispositions must be based.

Where there is no *strategical security*, there is *strategical surprise;* that is, a possibility for the enemy to attack us while we are not in a position to receive him under good conditions; a possibility for him to prevent our insufficiently protected assembly from taking place. Further, our forces as they go into action, go astray, imperil themselves by taking wrong directions, owing to lack of reconnoitring, of information, and owing to imperfectly understanding the notion of *security;* an idea which implies the art of acting not only *securely* but also *surely*, that is, with *full knowledge of the case.*

We shall establish this point with more precision by studying an historical instance.

The Strategical Surprise of the 16th of August, 1870 [1]

On August 15th, 1870, were found, on the German side (composing the First Army), the First Corps at Courcelles-Chaussy; the Seventh Corps between Pange and the Courcelles railway station; and the Eighth Corps at Orny.

[1] This instance, which will be completely studied later on, is considered here only from the point of view of the causes of the errors which formed its dominant feature.

In the morning of the same day, the Second Army was continuing its march in the direction of the Moselle. The Third Corps was to reach the Seille at Cheminot; the Twelfth Corps was to reach it at Nomeny; the Ninth Corps was to remain at Peltre; the Tenth was to arrive at Pont-à-Mousson, whence it was to send detachments northwards into the Moselle valley and on to the plateau to the west; the Guard was assembling at Dieulouard, and the Fourth Corps marching on Custines, on the Moselle, with its advance guard marching on Marbache.

After the news had arrived of the battle of Borny, fought in the evening of the 14th, these dispositions were somewhat altered—at about 7 a.m.: the Third Army Corps was ordered to stop immediately; the Twelfth to take up a position between Solgne and Delme; both corps to be ready to support and receive the Ninth Army Corps which had been maintained at Peltre, in case the French should take the offensive on the right bank of the Moselle.

The march was resumed later, on the receipt of a telegram sent by General von Moltke from the hill near Flaville at 11 a.m., which telegram ran as follows:

"The French have been completely thrown back on Metz and it is likely that they are by now in full retreat on Verdun. The three corps on the right (Third, Ninth, and Twelfth) are placed henceforth at the disposal of the commander-in-chief. The Twelfth is already on its way to Nomeny."

Finally, in the evening, the Second Army was distributed as follows:

Third Army Corps	5th division, Noveant; advance guard, Gorze. 6th division, Champey.
Tenth Army Corps	Pont-à-Mousson, 19th division at Thiaucourt.
Twelfth Army Corps	Nomeny.
Ninth Army Corps	Verny.
Guard	Dieulouard, advance guard at Quatre-Vents.
Fourth Army Corps	Custines, advance guard at Marbache.
Second Army Corps	Han-sur-Nied.

5th Cavalry Division at	Xonville, Puxieux, Suzemont	in touch with the French.
Guard Cavalry Division	Dragoons brigade, Thiaucourt Cuirassiers brigade, Bernécourt. Uhlans brigade, Ménil-la-Tour.	

This distribution answered to the views of the German Staff who, since the battle of Spickeren, did not think they would meet the French army again on the right bank of the Moselle.

The pursuit of the French had hitherto been entrusted to the First Army. The German Staff had confined itself to condensing (more particularly in the morning of the 15th) the right of the Second Army so that it should support, if need be, the First Army, at a moment when the enemy had seemed to intend making a stand.

The marching disposition of the Second Army, having a front of $16\frac{1}{2}$ to $17\frac{1}{2}$ miles, and a still greater depth, and thus requiring at least one day for concentration, was a formation presupposing a state of complete repose, which formation would do well enough so long as the enemy should abstain from acting upon it in any way—a condition which was not quite certain.

Therefore General von Moltke determined, as early as on the 14th, to get a clearer view of the situation. In order to be informed with complete certainty concerning the situation of the enemy, he ordered the Second Army, by an order of that day, to send its *whole* cavalry on the left bank of theMoselle towards the lines of communication of the enemy between Metz and Verdun, and to support that cavalry, in the direction of Gorze and Thiaucourt, with the corps which should be the first to cross the Moselle.

In execution of this order, the 5th cavalry division had reached, on the 15th, the neighbourhood of Xonville and Puxieux, and the Tenth Corps had advanced one of its infantry divisions to Thiaucourt. Instead, however, of sending out the *whole* cavalry, the Second Army had only devoted the 5th division to the reconnaissance prescribed; the 6th was still, on the 15th, at Coin-sur-Seille; it was, moreover, to fall in with the Third Corps on the 16th; the Guards division was scattered over the front, Thiaucourt—Bernécourt—Ménil-la-Tour, which

made it unable to act in any way, more particularly against the roads between Metz and Verdun, which were still at some distance; the Saxon division of the Twelfth Corps remained with its army corps.

The First Army, on the evening of the 14th, had just fought a hard and long battle. After having opened in an entirely unforeseen manner, that battle had been conducted in a completely unpremeditated way by the Germans. It might have been disastrous for them, as General von Moltke has acknowledged since, if the French, who had the means to do it, had thought of vigorously throwing back the heads of the German columns which were closing on them from too short a distance.

On the 15th of August, at 11 a.m. General von Moltke wires to the commander of the Second Army:

"The French have been completely thrown back on Metz and it is *likely* that they are *by now* in *full retreat* on Verdun. . . ."

Frederick Charles, on his side, has made a comment on the actual facts. The General Staff's historical records run thus:

"From information transmitted by General Headquarters during the day of the 15th, as well as from various reports, more particularly those of the Third Corps, the commander of the Second Army had been brought to the conclusion that the French army was in full and hasty retreat in the direction of the Meuse, and that it was therefore urgent to follow it without delay.

"A telegram sent as early as 11 a.m. on the 15th had imparted that appreciation to General Headquarters as well as a scheme which consisted in crossing the Moselle, on the 16th, with the army's main body. As no order to the contrary had come to reverse that decision, Prince Frederick Charles had fixed, at 7 p.m., the following dispositions for the 16th.

"*Pont-à-Mousson, August 15th, 7 p.m.*

"In the evening of yesterday, fractions of the First Army attacked the enemy near Metz and forced him back into the town. The French army *has begun retreating towards the Meuse.* From to-morrow onwards,

the Second Army will follow the adversary *in the direction* of that river.

" The Third Corps will cross the Moselle below Pont-à-Mousson in order to reach, via Gorze and Novéant, the main road from Metz to Verdun, either at Mars-la-Tour or at Vionville; its headquarters must arrange to be at Mars-la-Tour.

" The 6th cavalry division may go ahead via Prény and Thiaucourt so as to proceed from Pagny to the road above mentioned.

" The Tenth Corps which, preceded by the 5th cavalry division, is marching from to-day on Thiaucourt, will go on to-morrow towards the Verdun road about as far as Saint-Hilaire and Maizeray, and will recall, as quickly as possible, the fractions still in the rear at Pont-à-Mousson and in the Moselle Valley.

" The Twelfth Corps after leaving Nomeny will gather at Pont-à-Mousson and throw an advance guard beyond that place as far as Regméville-en-Haye.

" Its cavalry division will advance as far as the Meuse.

" The Guard will have an advance guard at Rambucourt, main body and headquarters in the neighbourhood of Bernécourt.

" The Fourth Corps will push on its advance guard to Jaillon, headquarters at Saizerais.

" An attempt will be made to establish connection, in the direction of Nancy, with the Third Army.

" The Ninth Corps will proceed to Sillegny, cross the Moselle at Novéant the day after to-morrow, by the bridge thrown across by the Third Corps, and follow that corps towards Gorze.

" The Second Corps will bring the head of its column up to Buchy.

" The *cavalry divisions* which are preceding the army must, in proportion as they advance, reconnoitre the debouching points and the crossings of the Meuse from the standpoint of their being utilised later on by the Tenth, Third and Ninth Corps at Dieuze and Génicourt; by the Twelfth at Bannoncourt; by the Guard, the Fourth and the Second at Saint-Mihiel, Pont-sur-Meuse, Commercy."

Meanwhile the following instructions had reached the commanders of the First and Second Army coming

from General Headquarters and dated from Herny, 6.30 p.m.:

"So long as the strength of the enemy forces left at Metz have not been ascertained, the First Army will keep, in the neighbourhood of Courcelles, a corps which will have to be relieved as quickly as possible by the troops coming from Sarrelouis, under General von Kummer. The two other corps of the First Army will take position, on the 16th, on the line Arry-Pommerieux, between the Seille and the Moselle. A bridge will be immediately established over that river, if the Third Corps has not already done so. Information concerning the movements of the Second Army during the day of the 15th is expected shortly; as for new dispositions to be taken, the following considerations will have to be taken as a general basis:

"The success secured in the evening of yesterday by the First and Seventh Corps, as well as by fractions of the 8th division, has taken place under conditions such as to exclude any idea of carrying it further. It is only by means of a vigorous offensive on the part of the Second Army against the roads from Metz to Verdun, via Fresnes and Étain, that the fruits of that victory may be attained. The commander-in-chief of the Second Army remains in charge of that operation which he must conduct according to his own inspiration and with all the means at his disposal.

"The Third Army has reached to-day, with the head of its column, the line Nancy—Dombasle—Bayon; its cavalry is scouting over the country in the direction of Toul and to the south.

"The General Headquarters of His Majesty will be established to-morrow, from 5 p.m., at Pont-à-Mousson."

We shall see later on what results those decisions were to lead to. In order, however, to discuss them in a sound manner, it is also necessary to examine the basis on which they are founded as well as the operations they are to involve.

First information coming from General von Moltke, August 15th, 11 a.m.: "The French have been completely thrown back on Metz. . . ."

On August 15th, at 11 a.m., the French columns had indeed been seen to retreat on the whole front towards

Metz. To state, however, that the French had been thrown back was to go further than the actual facts, and therefore to misread their real import. As a matter of fact, in the battle on the 14th, the Germans only sent into action portions of three army corps, namely the whole of the First Corps, the 13th division of the Seventh, and the 18th division of the Ninth (very weak fractions); in all the equivalent of only three divisions.

The fight had lasted for five hours, from 3 to 8 p.m. No spoils whatever had been brought back; only a few prisoners had been captured; no ground had been seized.

Under those conditions and after such weak tactical results, it was not possible to consider the French completely thrown back on Metz, or their main forces beaten. If they did retire, it was because they had received an order to that effect, not because they were compelled to do so. The results of the 14th might be considerable from a strategical point of view, they were as good as naught from a tactical point of view. When the French army should be met again later on, it ought to be expected not as a beaten army, but as a force in full possession of its physical and moral means of action.

As a sequence to this forced interpretation of facts, von Moltke added: "*It is likely* that by now (15th) the French are *in full retreat* on Verdun."

As that likelihood (as conceived at General Headquarters) did not lead to taking any practical measure other than handing over again to the commander of the army the three corps which had been previously immobilised, it did not seem to be in danger of bringing about any unpleasant consequences.

But what had been a mere *possibility*, a mere *likeliness*, as imparted to General Headquarters at Pont-à-Mousson, soon became a *certainty* under the influence of reports received more particularly by the Third Army Corps, as the Historical Records state them. The commander of the Second Army came at this stage to the *conclusion* that the French army was in *full and hasty retreat* towards the *Meuse*.

These actual reports received by the Third Corps still mentioned nothing but some French movements from Metz to Longueville, places still far from the Meuse.

As for the 5th cavalry division, it might have supplied information of a capital importance, had it been con-

sulted; it would have certainly reported that the roads to Mars-la-Tour and Conflans were free of the French, save in the neighbourhood of Vionville, where some cavalry bivouacs had been seen.

This conclusion of Prince Frederick Charles contains, then, all the characteristic features of a preconceived idea; the prince accepts von Moltke's *hypothesis* with such eagerness that he leaves out all the doubtful parts it may contain.

In order to feel safer, however, he imparts this view at 11 a.m. to General Headquarters. The Chief of Staff, a man given to careful choice, naturally reserved when not in possession of known facts, did not reply during the whole day. He knew what the *hypothesis :* "*It is likely that the French are by now in full retreat on Verdun*" was worth. Another supposition, equally well founded, might be substituted for it, namely that of Prince Frederick Charles : "*The French army is in full and hasty retreat towards the Meuse.*" He therefore allowed the commander of the Second Army to act from his own conclusion and to march to the Meuse, and he only intervened at 6.30 p.m. in order to state :

Second information, dated from Herny, 15th August, 6.30 p.m.

". . . The success secured on the 14th by the First Army has taken place under conditions such as to exclude any idea of carrying it further. It is only by means of a *vigorous defensive* on the part of the Second Army against the *roads from Metz to Verdun*, that the fruits of *victory* may be attained. The commander-in-chief of the Second Army remains in charge of conducting that operation according to *his own inspiration* and with *all means at his disposal.*"

We shall still emphasise several points in their order :

1. They speak of utilising a *victory ;* they know well or ought to know that it is nothing of the sort.

2. The *fruits of victory* can be reaped by making a vigorous offensive against the roads from Metz to Verdun.

That objective is already a more sober one than the Meuse objective, because von Moltke, being nearer the sources of accurate information (Borny), well perceives that nothing must be exaggerated.

He thinks that that objective may be attained by the Second Army. Still, he knows well that this army, in view of its distribution, will not be there in its entirety; that it cannot bring there, on the 16th, all its forces; it needs at least twenty-four hours for concentration even if it does not advance, but, if it is to cross the Moselle as well, it will need more than forty-eight hours in order to bring up its furthest corps (on the 18th, one of them, the Fourth, was still missing). As a result of his solution, then, he was about to send against the French army (the spirit of which had as a fact been raised by the resistance of the 14th), which is assembled and in good condition, only one army out of his three, namely the Second, and further, this Second Army will on arrival be greatly reduced, owing to its previous dispersion.

Von Moltke indeed perceived his combination to be inadequate, as it lacked a foundation and involved the use of a number of means the weakness of which did not escape his attention; therefore he concluded by writing:

"The commander of the Second Army remains in charge of this operation according to his *own inspiration* and with *all the means at his disposal.*"

Inspiration is thus resorted to; it cannot be otherwise. Failing positive intelligence, von Moltke has based his whole combination on supposition. He is the first to ask: what are these suppositions worth?

Failing definite knowledge founded on security which alone makes it possible to act surely, the only thing one can rely on is a more or less happy *inspiration.*

Von Moltke does not believe in his own inspiration any more than in that of Prince Frederick Charles. It is to give some sort of hint that he imparts to the latter his own view; but he is aware that he cannot *impose* either his view or the prince's. He thus leaves the commander of the Second Army free to act according to *his own inspiration* (which is as well founded as his own), and to develop any manœuvres he likes, with all the means at his disposal, in spite of the known impossibility of a part of the forces of the Second Army acting on the 16th on the left bank of the Moselle. After opening the door to error, he, in effect, gives over the command.

Let us now consider the order of Prince Frederick Charles, dated from Pont-à-Mousson, 7 p.m.

The commander of the Second Army will follow his

inspiration, as he has been asked to do so, and because his way of interpreting facts has not been criticised. Inspiration thus continues to be the foundation of German strategical combinations.

In proportion as we get further away from the sources of accurate information, von Moltke's supposition becomes a more substantial reality, as we have seen; and what is more, very solid reality.

"The French army is in *full retreat towards the Meuse*." In the presence of such a situation, a strong offensive against the roads from Metz to Verdun becomes groundless. A strong offensive is useless against an army beaten and in full retreat. By aiming at the roads from Metz to Verdun, the objective would be missed. The army must advance rapidly to the Meuse. Thus we arrive at the phrase: "From to-morrow, the Second Army will follow the adversary in the direction of that river. . . ."

As we have already seen, if Prince Frederick Charles had tried to verify his supposition by applying for information to the cavalry troops (5th division) established on the roads leading to Verdun and to the Meuse, the 5th division would have answered that, on the 15th, there was no French column *on the roads*, with the exception of one cavalry division at Rezonville, that therefore, the French army could not be there before the 16th at the earliest; that it would take the columns of that army more than a day to march past a given point, Mars-la-Tour for instance, since that army consisted of five corps (Second, Third, Fourth, Sixth, Guard) and there were only two roads available. But the prince, basing his decision merely on his own *inspiration* and leaving aside *intelligence* which would have supplied *truth*, equally leaves aside *calculation* and *reasoning* and works with his *imagination* alone. Therefore he aims at the Meuse. As, besides, the *French army is supposed to be beaten* and as *the Meuse is far away*, he organises a race, so as to catch the enemy columns there. The army is to remain *scattered*, so that it can advance *quickly*:[1] this is his only thought.

The already inadequate combination of von Moltke, which consists in attacking the actually untouched

[1] *i. e.* without the loss of time required for assembly.

French army with only one, and that an incomplete one, of his three armies, becomes still weaker when handled by Prince Frederick Charles. For the latter, instead of thinking of attacking, organises a pursuit; instead of an army seeking battle, he presents a scattered army: an entirely unfavourable distribution of forces for fighting a French army which has suffered no substantial check and the spirit of which has been enhanced by its victorious resistance on the 14th.

Moreover, as this view (which is justified by nothing) and the manœuvres which will be derived from it, are contrary to von Moltke's view (which, though not, of course, imposed, has still been very clearly expressed: "It is only by means of a vigorous offensive," etc.), Prince Frederick Charles will attempt simultaneously to march to the Meuse and to assume the offensive against the roads from Metz to Verdun, thus daring to aim at two objectives at the same time. The dispersion of forces which was already involved by undertaking the *pursuit* will become still worse.

Nothing will be left either of a solution or of a combination of forces. Thus, by aiming at two objectives so entirely different, and so distant from each other, the order on August 15th ends in utilising the network of roads to the utmost and in determining an unlimited dispersion of forces, along the front as well as in depth.

As for the cavalry divisions preceding the columns, they are, according to the order, neither to look out for the enemy in order to lead those columns in his direction, nor to find the enemy so as to report the imminence of danger. Their mission is simply to *reconnoitre the issues towards, and crossings of, the Meuse.* That state of mind has become fixed.

On the 15th, decisions of the utmost gravity have been taken on inspiration and without information; the army has been scattered to the extreme without keeping, by means of a security-system, the possibility of concentration if the need for it should arise.

On the 16th, inspiration and error still prevail. The commander-in-chief continues his attempt to base on a lack of any intelligence or protection the very directions given to the columns in order to reach the enemy; as well as to rely on chance for securing the time and space necessary to concentrating his army, in case the enemy

whose strength is no longer regarded should suddenly reappear.

The uncertainty of the blows contemplated is only equalled, here, by the insecurity in which the army is indulging as though of set purpose.

The notion of security, which enables one to master the unknown, and the risk of being surprised (which are both constant in war) are entirely ignored by the strategy of the Staff of the Second Army; Moltke had perceived their importance when ordering, on the 14th, the whole cavalry of the Second Army to be sent to the left bank of the Moselle, and to be supported with infantry. He had not, however, believed in their absolute necessity.

In consequence of those orders, and on the supposition that the enemy would not attack, the Second German Army was, on the 16th of August at night, to be distributed as follows (See Map No. 7):

Third Corps . .	Vionville—Mars-la-Tour.
Tenth Corps . .	Saint Hilaire—Maizeray.
Twelfth Corps .	Pont-à-Mousson.
Guard . . .	Bernécourt.
Fourth Corps. .	Saizerais.
Ninth Corps . .	Sillegny.
Second Corps. .	Buchy.

As for the two other armies, First and Third, neither of them was in a position to support the Second Army for several days.

Such a distribution would have permitted no more than the *pursuit* of a *beaten enemy*, concerning the *retreat* of which *positive information* had been available; these conditions not being fulfilled there was risk of the greatest possible dangers. If, indeed, the enemy did come on, either in order to take the offensive, or merely to undertake a retreat about which no precise information was available, the Germans had deliberately placed themselves in a position where they would not be able to receive him; it was impossible for them to assemble their forces, be it those of even a single army, before a severe check should take place. *Surprise* would be complete.

Wherefrom, then, did such a dangerous mistake on the part of the German generals arise, if not from ignoring the notion of strategical security? Is it not a fact

that both of them thought they could set up their strategical combination without being in full possession of well-ascertained facts? And as far as the information they had to hand, about the affair of August 14th, was concerned, did they not, consciously (Moltke) or unconsciously (Frederick Charles), alter or at least exaggerate its meaning and import?

Once it had thus arisen from the one original cause, the error naturally took two different shapes, according to the varying temperament of the two men.

Once the power of reflection resulting from study and method comes to an end, personal character quickly asserts itself. When doctrine ceases, a known doctrine, a doctrine learned from practice, men act on personal lines.

Moltke: a Chief of Staff constantly appealing to his own intelligence, leaning on reason, an intellectual rather than a performer, meets the *unknown* by building up an *hypothesis;* a logical hypothesis it is true, but one exclusively derived from his own imagination, and one which, by the way, he does not consider to be undisputable; he thus ends by framing a solution which he does not impose. After discussing the various combinations the enemy may adopt, he selects the most rational one, wherefrom his own scheme of manœuvre will be derived. His supposition *seems* in every respect to be true, however it is *not* true. For want of belief in the accuracy of his own decision, he does not dare to impose it; he advises, he does not command, remaining a Chief of Staff instead of being a commander of armies. For that reason, the great results of the war were only partly due to him. He behaved in the same way at Sedan, where he again ceased commanding on August 30th, and where the enveloping movement resulted from an understanding between two armies, not from a decision taken at headquarters. He behaved in the same way during the operations on the Loire.

Frederick Charles was a man of action in the highest degree; the mere thought of a great result being possible turned his head to the point of depriving him of the ability to perceive what should be his starting-point, or to measure all the import and risks involved. Von Moltke's hypothesis became a certainty to him. He rushed on impetuously. Up to the end and uncon-

sciously he will remain blindfold. He claimed a kill before finding his fox.

This is precisely what happens in general when a man starts from a supposed certainty which is founded on nothing. Just as Frederick Charles had not felt the need of getting hold of a well-founded truth, so he did not find it necessary to verify his belief, and the latter still held good to his mind. He did not seek for information on the 16th, we have seen that; but more than this, on the same 16th, at noon, he dictated an order which settled the way in which the whole of the Second Army should arrive on the 17th at the Meuse (he was still banking on the alleged victory of the 14th), an order which the official Records of the Great General Staff has carefully preserved for us (although it was not carried out in the least); as though it did not contain the most bitter and violent criticism of the decision taken by that prince during these days; as though it were not a kind of ironical monument set to him, the interest of which, from an historical point of view, can only consist in exonerating von Moltke from the responsibilities incurred during the acute crisis of August 16th—and 17th.

"*Headquarters at Pont-à-Mousson,*
"*August 16th,* 1870, *Noon.*

"ARMY ORDER

"The Second Army will continue to-morrow to march towards the Meuse. The First Army will rapidly come up behind its right wing. In view of the direction taken by the retreating enemy, this wing of the Second Army will perform its movement as follows:

"The Tenth Corps will cross the Meuse below Verdun. It will send out detachments towards that town.

"If the pursuit results in carrying that army corps rather far to the north, the points of Clermont-en-Argonne and Saint-Menehould are fixed, from this date, as being those in the direction of which it will have to march, so as to become henceforth the right wing of the army.

"The Third Corps will march to-morrow on Étain, where it will place an advance guard, unless the situation in respect of the enemy makes it necessary to decide otherwise. Troops left in charge of the bridge thrown

across the Moselle will rejoin as soon as they shall have been relieved by the Ninth Corps, a relief which is to take place to-day.

"The Ninth Corps will proceed, to-morrow, to Mars-la-Tour. If possible, this army corps will manage during the same day, to replace the bridge built by the Third Corps by another one, made with boats captured on the Moselle; after which, the light bridge train of the Third Corps will resume marching in order to rejoin its corps. The three corps of the right wing above mentioned will keep mutually connected with each other, and will, every day, make their position known to my headquarters, at points mentioned hereafter. In case of a serious encounter with the adversary occurring, Infantry General von Voigts-Rhetz is authorised to dispose first of the Third Corps, then also of the Ninth, if this prove necessary.

"If, as must be expected, no encounter of that nature occurs, the Third Corps and the Ninth will proceed on the 18th, the first in the direction of Dieue-sur-Meuse, the other in the direction of Fresnes-Génicourt, in order to take possession, as soon as possible, of the bridges there crossing the Meuse.

"In case the Ninth Corps should arrive in advance, it must undertake to secure these two crossings at the same time.

"The Twelfth Corps will arrive to-morrow, with the head of its columns as far as Vigneulles, with its main body as far as Saint-Benoît-en-Woëvre, where it will place its headquarters. Cavalry will be thrown on to the Meuse and beyond it.

"On the 18th, this corps will continue marching on Bannoncourt, and take possession of the debouching point on the Meuse that is to be found there.

"The Guard will march to-morrow on Saint-Mihiel, push a strong advance guard on to the left bank of the Meuse, so as to protect that important crossing point, and place its headquarters at Saint-Mihiel.

"Its cavalry will go ahead, in the direction of Bar-le-Duc.

"The Fourth Corps will soon after advance on Commercy by the line Jaillon—Sauzey—Boucq, in so far as the fortified town of Toul may not determine a partial interruption of the movement.

"The Second Corps will make to-morrow for Pont-à-Mousson, and establish the head of its column in the direction Limey—Flirey—Saint-Mihiel. Headquarters at Pont-à-Mousson.

"My headquarters will be to-day at Thiaucourt, from 5 p.m.; to-morrow, from noon, they will be at Saint-Mihiel until further orders.

"Once the Second Army shall have arrived on the Meuse and the bridges over that river shall have been secured, the troops will probably remain in their positions for a few days, until the lateral armies shall have come up in line.

"Every army corps will send an aide-de-camp every day to my headquarters. Such officers may use carriages, if need be, with their saddle-horse following the carriage, and must further be escorted by infantry orderlies.

"*The Cavalry General,*
(*Signed*) "FREDERICK CHARLES."

When, after the war, Moltke criticised the decisions of the 15th, his vindication of Prince Frederick Charles was very restrained. Thus he wrote in the Records of the General Staff:

"The Third and Tenth Corps, as well as the two cavalry divisions attached to them, had the mission to outline a powerful demonstration against the Verdun road (powerful, with this reservation, that it only involved two army corps separated by more than nine miles, and that it might, between Saint-Hilaire and Mars-la-Tour, come up against the whole French army).

"As for the other fractions of the army (that is, four corps), they went on in a fully westerly direction towards the Meuse.

". . . The consequence of the plan of the commander of the Second Army was, then, to turn the resultant of these movements in the direction of the Meuse. If the French were not found on the Moselle, it was hoped, owing to the marching qualities of German troops, that they would be rejoined on the Meuse.

"Reports received from the 5th cavalry division during the day of the 15th had not yet clearly established the actual situation." (Information had not been asked for, because they were convinced that they were

well informed. Otherwise the cavalry would have reported that the French were not retreating on the roads from Metz to Verdun; let us state once more that reason should likewise have shown that their movement ought to have taken at least forty-eight hours.) "Instructions from general headquarters, arriving at Pont-à-Mousson on the 15th at 10 p.m. attached a particular importance to the occupation of the roads from Metz to Verdun; but after sending in that direction two army corps and two cavalry divisions, one had the right to believe that one had adequately taken that recommendation into account."

On the morning of the 16th, the various fractions of the German army started without the above-mentioned decisions having been altered, without anybody, as we have seen, attempting to verify the accuracy of the initial assumption; besides, until 1 p.m., nothing in the reports received by the Third Corps had appeared to the Prince to be of such a nature as to induce him to alter in any way the measures he had adopted. The true situation was only known at that moment at the headquarters of the Second Army. It would have been known earlier if it had only been sought for, as is clearly shown by the actual facts.

But the certainty and quietude which occupied Prince Frederick Charles's mind were not shared by all his subordinates:

"Infantry General von Voigts-Rhetz (commanding the Tenth Corps), feeling some anxiety on account of those French bivouacs, the existence of which had been reported on the preceding day, thought it necessary to combine, with the movement of his army corps on Saint-Hilaire, *a strong reconnaissance* on the camps observed in the evening of the 15th in the neighbourhood of Rezonville. He had attached to that operation the 5th cavalry division under General von Rheinbaben, which he also reinforced, very early on the 16th, with two horse batteries from the corps artillery brought from Thiaucourt to Xonville by the Chief of Staff of the Tenth Army Corps, Lieutenant-Colonel von Caprivi, under escort of the 2nd squadron of the 2nd regiment of dragoon guards. In order to support this reconnaissance, the order was also given to half the 37th infantry brigade which was

at Thiaucourt to join, at Chambley, the detachment of Colonel von Lynker, sent out from Novéant in the Moselle valley. General von Voigts-Rhetz intended to march, meanwhile, from Thiaucourt on Saint-Hilaire, with the remainder of the 15th division. . . ."

Here is a highly practical lesson. People in high quarters believed they could do without security; the performers in the front rank reinstate security. They do not advance blindfold in the midst of danger. It was merely human; such a game would have proved too risky for them. However, they reinstated security imperfectly and too late to undo the harm that had been done. Practice as well as theory showed, then, that the best way was to attend to security before doing anything else, and to form this advance guard (5th cavalry division, 37th brigade, two corps batteries).

From the search made by the 5th cavalry division, soon to be continued by the 6th division, which arrived close behind the Third Corps, finally arose a knowledge of the situation.

What was found is well known. The Third Corps had marched into an ant-hill. The French army, instead of being in full retreat towards the Meuse, was completing the evacuation of Metz; its moral was excellent, having been even enhanced by the fight on the 14th. It was assembled between the two roads to Conflans and Mars-la-Tour, four miles from Gorze. The Third Corps came up and struck full against that assembly. Under what conditions will the Second German Army meet the main and yet unbeaten forces of the adversary?

At 11 a.m., when the battle was in full swing, all the various army corps, other than the Third, were on their way in order to reach the cantonment assigned to each of them: the Tenth, was marching by the road to Thiaucourt, Saint Benoît, and Maizeray, at an average distance of $10\frac{1}{2}$ miles from Vionville; the Guard, at a double distance, about 24 miles; the Fourth at a triple distance, 33 miles; the Twelfth, Ninth and Second, in second line, were more than a day's march to the rear.

Under those conditions, the Second Army could only oppose to the French forces debouching from Metz, on the 16th, one full army corps, the Third and the greater part of the Tenth, on the 17th, three or four army corps.

It had to wait until the 18th to assemble the largest part of its forces.

We have here, then, a strategical surprise in the fullest sense of the word. In the presence of an enemy who should have been an active and able tactician, or even in the presence of a commander who had the *object of war* in mind, it would have become impossible for the Second Army to assemble on the 16th or even on the 17th, which would have meant incurring a disaster; it would have become impossible for the two other armies to lend that Second Army any efficient help: what would have become, then, of their own situation?

Surprise consists in the hard fact that the enemy suddenly appears in considerable numbers, without his *presence* having been known to be so *near*, for want of *information*, and without it being possible to *assemble*, for want of *protection;* for want, in one word, of a security-service.

The crisis arose, as we have seen, from the lack of strategical security, of such security both as an *essential notion*, without which no strategical disposition can be provided with a sound and safe foundation; and also as a thoroughly organised *service capable* of mastering the *unknown* and of guarding against *surprise*.

From the first, the Germans had made a leap in the *dark* by starting from an *hypothesis* (Moltke), from a *conviction* devoid of foundation and verification (Frederick Charles).

A whole manœuvre was based on these data, in an uncautious way.

Let us profit by this and conclude:

1. In strategy, as in any other business, a *leap in the dark* is the reverse of *sound action;* nobody has the right to substitute for *actual facts*, which must always be sought, the productions of imagination, mere suppositions. On facts alone can a rational manœuvre be founded.

2. In any case, in strategy as well as in tactics, no manœuvre must be undertaken that leads to dispersion before making sure that one is able, when necessary, to transform it into a concentrated disposition. The necessity of a strategical security-service thus becomes quite clear: an advance guard, able to inform, able to protect.

Let us, besides, remember Napoleon's quotation (p. 154) concerning the necessity for an army's always being in a position to put forth the whole resistance of which it is capable; concerning also the necessity, for a general, of never basing his decisions on anything but reports which are certain and true at the moment when those decisions are to be carried out.

Whenever men like von Moltke and Prince Frederick Charles are seen to err, people are inclined to think that the problem outreaches the limits of human perception; they feel inclined to charge with foolish conceit any one attempting to be more clearsighted or more farsighted. Theory, at any rate, is tempted to such a conclusion. But is it not the chief characteristic of study that it attempts to discover the means of reducing the chances of committing those errors of which human nature is always capable, or of lessening the consequences of such errors once they are made; of removing the limits of the unknown, of bringing the mind from ignorance to knowledge, so as to make our intelligence more *efficient?* Is it not characteristic of science that it should, by means of a series of discoveries, place within reach of average men the possibility of doing better than superior men of the past, by teaching them processes discovered by genius?[1]

It is in a slowly progressive manner that truth is mastered. The German army of 1870 still kept to mere *tactical* security. Yet we find the notion of *strategical* security in its fullest sense in all Napoleon's wars, as well as among the German staffs of 1814 and 1815. The theory is likely to rise again to-day, for it has been fully alive in the past.

[1] Progress is made in that way; one instance, among others, will show it. Do not commonplace surgeons successfully perform to-day, owing to Pasteur's wonderful discoveries, operations which the greatest practitioners of the beginning of the nineteenth century never dared to undertake?

CHAPTER IX

STRATEGICAL SECURITY

Let us consider an instance, taken from the beginning of the campaign of the army of Italy in Hungary in 1809; we shall find Napoleon explaining to Prince Eugène the method which tends to developing a strategical manœuvre both *surely* and *securely*.

We are at the end of May 1809. The army of Italy (Prince Eugène), pursuing the Archduke John, has reached Gratz. It had marched in the direction of Leoben, then in the direction of Vienna, so as to join the army of Germany on May 26th at Brück, while the Archduke John withdraws from Gratz into Hungary, either in order to manœuvre on Raab, or in order to operate from there against the still dispersed troops of the army of Italy. (See Sketch I.)

Macdonald actually arrives at Gratz, via Laybach, on the 30th of May. He stays there, waiting for orders from Prince Eugène, as well as for news of Marmont, who is arriving, on his side, from Istria and Carniola.

The general situation on the French side was at this moment the following: three divisions at Neustadt, the Macdonald column arriving at Gratz, Marmont's corps marching in the same direction. The whole is protected by a strong advance guard commanded by Lauriston, and sent out by the army of Germany as far as Oedenburg.

Napoleon writes to Eugène:

"*Ebersdorf, June 3rd*, 1809, 10 *p.m.*

"My son; General Lauriston reports that the advance guard of Prince John seems to be making for Oedenburg or, at any rate, that, instead of marching by Körinend, it has gone by Rechnitz in a direction between Körinend and Oedenburg, which would suggest that his corps wants to rally on Raab and that, intending to

THÉATRE DES OPÉRATIONS
de l'Armée d'Italie en Hongrie - 1809

M^r Foch. – Des Principes de la guerre.

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take the road to Körinend, he is sending out scouting parties on his left to a distance of seven or eight leagues from Körinend. It is even not at all impossible that, having heard from the inhabitants what small numbers occupy Oedenburg, he should try to attack that town suddenly. I have no objection to your transferring your headquarters to Oedenburg (General Grouchy can go there from Brück without passing through Neustadt) and setting out to pursue Prince John in order to cut his line of retreat, provided only you make sure he should not pass over to your right, that is, between you and Brück or between Oedenburg and Neustadt. . . .

"I leave you free to proceed to Oedenburg, without giving you a precise order, because I suppose that you are getting, from your right, reports which enable you to act in compliance with my intentions, which are contained in the following idea: *you must try to do some harm to Prince John.*

"You can do this if he retires on Raab; if he retires on Pesth you can do nothing without being compelled to undertake exaggerated movements which would carry you too far from the army. Finally, at Oedenburg you will not be further from the army than from Neustadt. To repeat it once more, it is enough if nothing passes over to your right and cuts you off from Brück and General Macdonald. You must find out what there is at Friedberg and at Hartberg."

Prince Eugène marches on Oedenburg, whence he first of all attempts, by sending out his *cavalry* supported by *one battalion* on Körinend, to secure some information concerning his adversary, who seems to be restless, and who might, later on, either proceed to the Danube and thereby join the Archduke Karl, or act on Macdonald, via Körinend, before all the French forces coming from Italy should have assembled.

Napoleon writes to him:

"*Ebersdorf, June 5th, noon.*

"My son; I have your letter of the 4th, 9 p.m. I approve of the movement you have made on Körinend. The cavalry ought, however, not to have gone there without infantry. I fear lest that Baden battalion should, at such a distance from the main forces, be

involved in some risk. As it appears from General Macdonald's letter that the enemy is still opposite Wildon, and that the Gyulai corps is near Radkersburg, a strong cavalry division on Körinend, pushed on to the rear of the enemy, could protect our communications, especially if it be supported by a detachment from General Macdonald on the same point. Write to him in that sense. General Macdonald must not send out a reconnaissance, but a strong advance guard to Fürstenfeld and thence on Körinend."

Napoleon, then, does not believe cavalry to be able to fulfil by itself that first part of the task; he wants the cavalry to be supported at Körinend by a *strong advance guard* coming from Fürstenfeld. It is a strongly constituted organ of this sort, instead of even numerous squadrons, which he expects to carry out a real reconnaissance.

Meanwhile, however, Prince Eugène had conceived at Oedenburg the idea of proceeding to Raab in order to cut the Archduke John off from the road to the Danube by which the latter might have joined the Archduke Karl. Such a manœuvre arose from *a preconceived view:* it might fail to go home, it might in any case be *parried.* We shall see what theory Napoleon opposed to it.

"*Schoenbrunn, June 6th,* 1809, 9 *a.m.*

"My son; I have your letter of the 5th, 10 p.m., in which I see that Colbert has at last found the Archduke John. The first thing you have to do is to march together and united. I do not think that the Seras and Durutte divisions and the five cavalry regiments of General Grouchy will suffice; the corps of Baraguey d'Hilliers and the Guard must be with you, so that you should have 30,000 men, who should march in close formation in order to come into action together, and be able all to arrive on the same battle-field within three hours' time. I leave the Lauriston corps at your disposal, so that you will be reinforced by 3000 infantry, and the three cavalry regiments of Colbert. I also leave at your disposal the Montbrun division, which consists of four cavalry regiments. Thereby you will have eleven regiments of light cavalry, three regiments

of dragoons and a corps of nearly 36,000 men. Send at least half of these 36,000 men as an advance guard to march on Körinend. The Duke of Auerstaedt is opposite Presburg with the Gudin division and the light cavalry division of General Lassalle. You will not receive this letter before noon; it is impossible that you should not have received news by then from General Lauriston, from General Montbrun, from General Colbert, and even from General Macdonald, which should give you clear particulars about the situation of Prince John.

"In plains, such as these of Hungary, manœuvring will necessarily be different from what it is in the passes of Carinthia and Styria. In the passes of Styria and Carinthia, if one succeeds in forestalling the enemy at a point of junction, as, for instance, at Saint-Michel, one cuts off the enemy column; in Hungary, on the contrary, as soon as the enemy shall have been forestalled on one point, he will make for another. Suppose, for instance, the enemy is making for Raab and you arrive in that town before him: the enemy, after hearing of it on its way, will change his direction and make for Pesth . . .; in that case, your movement on Raab would increase the distance between you and the enemy; it might even induce him (for the enemy is not as we are; being in his own country he is well informed) to attack Macdonald and rout him. I think, therefore, that the movement, first on Güns, later on Stein-am-Anger, then on Körinend, or from Güns to Sarvar, is the soundest movement, provided you have no other information than what I have at the present moment. You may march to-night on Güns with the Colbert brigade, the seven regiments of the Grouchy division and a considerable force of artillery (you must put your light artillery, at least twelve guns, with your cavalry), and the Seras and Durutte divisions. Baraguey d'Hilliers's corps may arrive to-night at Oedenburg, or even get as far as Güns, or march to the junction of the road to Sarvar and Raab, on Zinkendorf. According to the news you receive, you may combine, to-morrow, the movement of your two columns on Sarvar or on Körinend. General Montbrun ought to have been yesterday night, the 5th, at Gols, and as he must link himself up with General Lauriston, you will not fail to be supplied with information."

Let us pay attention to the following points in this letter:

In a country of easy communications like Hungary (and it is the same case in a great part of Europe), *the enemy remains free to move in every direction so long as we have not seized him.* The *a priori* manœuvre on Raab may then:

1. Either *strike into the void,* if the enemy does not come on.

2. Or *be parried:* forestalled on that point, he will make for another.

3. Or even *bring about a crisis:* incite the enemy to attack Macdonald and to rout him.

The *soundest* manœuvre consists in marching on Güns, then on Stein-am-Anger, then on Körinend, in the direction where the enemy *has been reconnoitred.*

How should this march be organised? By sending forward a strong advance guard followed by a united main body.

Looking at the question again from a higher standpoint, Napoleon writes on the following day:

"*Schoenbrunn, June 7th,* 2.30 *a.m.*

". . . While pursuing Prince John from the Tagliamento, you have not marched in a sufficiently close order, and we might have had unpleasant experiences. As a matter of fact, had Prince John concentrated his forces at Tarvis, it might have been impossible for you to beat him. You were distributed into three corps: Macdonald, Seras and yourself. . . . You know I am making those remarks for your own benefit. It is necessary to march with all one's forces well together; let us have no small parties. Here is a general principle in war: a corps of 25,000 or 30,000 men may be isolated; if well led, it can fight or avoid fighting or manœuvre according to circumstances without experiencing anything disastrous, because it cannot be forced to fight, and finally because it is able to fight for a long time. One division of 9000 or 12,000 men may be left, without risk, isolated for one hour; it will hold the enemy in check, however numerous that enemy may be, and give the army time to arrive. It is therefore customary not to form an advance guard

with less than 9000 men, to make the infantry of that advance guard camp in close order, and to place it at an hour's distance from the army. You have lost the 35th because you ignored this principle; you formed a rear guard with one regiment, which was subsequently outflanked. If there had been four regiments there, they would have formed *such a resisting mass that the army would have come up in time to succour them.*

"... To-day you are about to start upon a regular operation: you must march with an advance guard composed of *plenty of cavalry, a dozen guns and a good infantry division.*

"The whole remainder of your corps will have to bivouac one hour in the rear, light cavalry covering, of course, as much as possible. ...

"From your advance guard to the rear of your park, there must not be more than three or four leagues. ..."

The strongly organised advance guard just mentioned, therefore, is not merely the *reconnoitring force* we have already seen to have been sent from Oedenburg on Körinend. It is also such a *resisting mass* that the army may arrive in time to reinforce that advance guard and continue the battle engaged, to strike the enemy when he is held at last.

To sum up, contrary to Prince Eugène, who organises *scouting* and *manœuvre* independently from each other, by basing himself in both cases on the ground and on the *supposed* intentions of the enemy, Napoleon wants manœuvre to be but a *development of scouting*, the latter being successively modified to that end, owing to the strong advance guard capable, *first*, of *supporting exploring parties* searching for news; *secondly*, the enemy having been found, of itself taking up the intelligence service, and, to this end, of transforming exploration into a *reconnaissance; thirdly*, capable, after finding and reconnoitring the enemy, of *fixing* him for such a length of time as is necessary for the main army to arrive.

The main body of the army follows behind, ready to utilise those results immediately, to set up a system or a combination. How could this army manœuvre otherwise than *surely* and *securely*, being protected by those dispositions which constantly aim at scouting, at covering and preparing the manœuvres?

Does not every duel, moreover, every fight against a living and free adversary, develop in the same way?

On guard . . .	Cover yourself.
Engage the sword . .	Establish contact.
Stretch out the arm .	Threaten the adversary in the direct line so as to fix him.
Double or disengage or what not.	Manœuvre only when this stage is reached.

We shall see later on how these views might have been applied to the situation of August 15th, 1870, which we have criticised above.

Let us for the time being keep to Napoleon, when he explains strategical security to Prince Eugène by means of the following considerations:

"As you did not know anything about the enemy's schemes, you were perfectly right in sending your whole cavalry on Körinend, in sending for news. But you were wrong in sending it without infantry, for cavalry cannot fulfil this task by itself; it ought to have been accompanied by a strong infantry advance guard. . . .

"You were equally wrong in deciding from the first to make for Raab in order to cut off the Archduke John from his road. He would have heard of your movement, he would have escaped. . . ."

In countries with numerous communications, one ought not to manœuvre *a priori* against an enemy in possession of his freedom of movement. One ought to begin by getting hold of him; once that preliminary condition has been fulfilled, the opportunity will arise to carry out a manœuvre the effect of which shall be safe and certain.

The advance guard, which has fulfilled the first part of the task, getting information, must then fulfil the second, keeping a hold on the adversary, keeping actually in touch with him, so as to make it possible to organise a *well-founded* and *right* manœuvre, that is, a manœuvre *corresponding to the circumstances*. The advance guard attacks the enemy if he tries to escape. It resists by means of a defensive and of a retreating manœuvre if he attacks.

Entering upon operations implies, therefore, to the Emperor's mind: making for the enemy, with an advance guard and a main body capable: The one (namely, the main body) of carrying out a *manœuvre* at the last hour, set up according to circumstances: The other (namely, the advance guard) of guaranteeing *sure action*, that is, of supplying *positive* information and *certainty* as a base for the contemplated manœuvre; *security*, so that the manœuvre may be prepared and carried out without danger.

We shall find this notion of security, thus understood, to be present in all the actions of war undertaken by Napoleon (1805, 1806, 1809, 1812), and each time with dispositions varying according to the moment and the operation undertaken; always, however, leading to a certain combination of time, space and forces.

The notion of strategical security was completely ignored by the German armies of 1870, and the result of that fault in conducting the war was that they often found themselves in a particularly critical situation. Nothing but the immobility, the complete passiveness of the French made it possible for them to come out of such situations without a disaster.

Strategical security was, however, known and put in practice by the Germans of 1813 and 1814. Taught by the severe lessons received from the Emperor, they had grasped its importance. They scoffed at those French generals who misappreciated its import. Thus Clausewitz wrote:

"Have we not seen, in spite of the method adopted by the Emperor Napoleon, French corps of 60,000 or 70,000 men march, under Marshal Macdonald into Silesia and under Marshals Oudinot and Ney into the Mark, without an advance guard being so much as mentioned!"

He was alluding to the French defeats of the Katzbach, of Donnewitz, of Gross-Beeren.

I. A Typical Disposition ensuring Strategical Security

The beginnings of the campaign of 1815 show clearly how the army of the Lower Rhine comprehended the

organisation and utilisation of bodies in advance guard.[1] The enemy having assumed the offensive, the first thing to be done was to concentrate the forces. The First Prussian Corps shows us what tactics ought to be used to that effect by the advance guard. (See Map No. 9.)

In the first half of June 1815, the army was distributed as follows:

First Corps General Ziethen Headquarters at Charleroi	1st brigade at . . .	Fontaine-Lévêque
	2nd brigade at . .	Marchiennes
	3rd brigade at . . .	Fleurus
	4th brigade at . . .	Moustier-sur-Sambre
	Cavalry reserve at .	Sombreffe
	Artillery at . . .	Gembloux.
Second Corps General Pirch Headquarters at Namur	5th brigade at . . .	Namur
	6th brigade at . . .	Thoremberg-les-Béguines
	7th brigade at . . .	Heron
	8th brigade at . . .	Huy
	Cavalry reserve at .	Hanut
	Artillery	along the road to Louvain.
Third Corps Thielmann Headquarters at Cinay	9th brigade at . . .	Assesse
	10th brigade at . .	Cinay
	11th brigade at . .	Dinant
	12th brigade at . .	Huy
	Cavalry reserve . .	between Cinay and Dinant
	Artillery at . . .	Cinay.
Fourth Corps Bülow Headquarters at Liège	13th brigade at . .	Liège
	14th brigade at . .	Warenne
	15th brigade at . .	Voiroux-Gorey
	16th brigade at . .	Voiroux-les-Liers.
Cavalry reserve	1st brigade at . . .	Tongres
	2nd brigade at . .	Dahlem
	3rd brigade at . . .	Lootz.
Artillery reserve	Gloms	
	Aihem.	

The total of the forces was 110,000 men.

That distribution of the army was far from perfect from a military point of view. It resulted mainly from the difficulty in which they found themselves of enabling troops to live. Blücher was receiving no money from his government; the local authorities were little inclined to supply him with the same; the inhabitants had to be

[1] The Prussian army of the Lower Rhine, commanded by Marshal Blücher, had General Gneisenau as Chief of the Army Staff, General Clausewitz as Chief of Staff of the Third Corps. It is from the writings of the latter that we borrow part of the considerations which justify the distribution of the army on the ground, as well as the use its leaders thought they would be able to make of it.

applied to in order to feed the army, and this for a long period of time. Blücher did not contemplate taking the offensive before July 1st, and the troops had arrived in the country as early as in May. In view of that situation, he had been compelled to scatter them.

The Prussians nevertheless retained their intention of making an offensive; however, while they were waiting for the third allied army (Austrians, Bavarians, Wurtembergians) to arrive on the field of operations, they had granted Wellington's request to postpone offensive operations, and it had been agreed that, in case of any unforeseen attack on the part of Napoleon, the Prussian and the English armies should effect their junction on the road from Namur to Nivelle via Sombreffe.

Indeed, such an adversary as Napoleon was, a man "who dared to place the whole decision in a single, eagerly-sought battle" (Clausewitz), could only be met by concentrating, at the right moment, both allied armies on a common point or on two points so near to each other that they could act together, then by resorting to tactics in order to make victory result from the large numerical superiority this first operation would provide.

With this end in view, "the Prussian Army, separately considered, stands as to two of its army corps in the Meuse valley, where the towns of Liège, Huy and Namur supply billets for numerous troops. It has *one corps* (the First) on the Sambre *towards Charleroi; another* (the Third) towards *Cinay*, on the right bank of the Meuse, both being pushed ahead as *feelers;* headquarters at Namur, a central point, three or four miles from the corps sent on ahead, and connected with Brussels by a main road. Its extension is 32 miles of front and 32 miles in depth; it can therefore close up on its centre *within two days—it is sure to have two days in which to do that.* Once assembled, it may either risk a battle, if it thinks itself strong enough, or withdraw in any direction, for it has in its neighbourhood nothing that ties it up or limits its freedom of action.[1]

[1] In contrast with this view of the Prussian staffs, another would seem to have prevailed within the English army. Being distributed from Mons to the sea (80 miles), from Tournay to Antwerp (60 miles), with headquarters at Brussels (45 miles from the most advanced body), it cannot assemble on any central point within less than four

"At Blücher's general headquarters, the ground of Sombreffe had been adopted as a point of concentration for the Prussian army. The rivulet of Ligny and a small tributary to it form, parallel to the road to Sombreffe and as far as Saint-Balâtre, a depression in the ground, which of course is neither very steep nor very deep, but is sufficiently so to ensure on the left slope of the valley (which is the commanding one) an excellent position for the action of all arms. Its extent was an average one (two miles), so that, once occupied by one or two corps, it could supply a prolonged resistance. Blücher, then, kept in hand two corps in view of an offensive movement and might thus decide the fate of the battle, either by himself, or together with Wellington."

In the Prussian general's mind, the idea of a concentration and that of the point where it must be effected are quite clear. It remains to discuss the possibilities of carrying out the same at the right time.

"The point of Charleroi is nearest to the point of concentration; it is only fourteen miles from it. If the news of the enemy's arrival come from Charleroi to Namur, and the order for concentration is sent on from there to Liège (which is the remotest cantonment), sixteen hours will be necessary for that order to arrive, another eight hours for the troops to be warned and to gather: in all, twenty-four hours will be needed before the Fourth Corps can start marching.

"From Liège to Sombreffe is some forty miles, two very full days' march; three days will be needed, therefore, before the Fourth Corps can arrive at Sombreffe. The Third Corps at Cinay might arrive within thirty-six hours; the Second at Namur within twelve hours.

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or five days. How can it hope to find those four or five days, with its most advanced cantonments (Tournay) within one day's march of the great French fortified town of Lille? It is, indeed, obvious that any important French attack starting from the neighbourhood of that town could be sufficiently held up during the four or five days required for the contemplated concentration.

Wellington had never personally confronted Napoleon. Ignoring the violence and quickness of the Emperor's attacks, he very likely believed his dispositions to be sufficiently good to give him the time to meet the adversary's undertakings, and more particularly to be able to join the Prussians.

"Moreover, the resistance of General Ziethen on the Sambre, and his withdrawal as far as the neighbourhood of Fleurus, could not provide more than one day's retention of the enemy—from a morning to an evening. The night would provide the remainder of the twenty-four hours.

"It might be expected, besides, that the enemy's march would be known before the first gunshot should have been fired, at any rate when he had reached the last position before assaulting the Prussian troops, and very likely (owing to other information) a few days before.

"Should the latter opportunity arise, there would be enough time for concentration.

"In case no other intelligence was forthcoming than that supplied by actual observation (*i. e.* in case the enemy schemes should only be disclosed by his attack on the outposts), the Second and Third Corps alone could arrive near Sombreffe in time to join the First; the Third, besides, only with difficulty; the Fourth would be missing at the general concentration.

"This danger was clearly perceived by Blücher's staff, but it was very difficult to bring the Bülow corps nearer (on account of supply). However, as soon as movement was observed on the French side (on June 14th), that corps was ordered to make for Hanut, which was only twenty miles distant from the concentration point, and where would therefore be nearer than the Third Corps at Cinay.

"Under those conditions, Blücher thought he would be able to assemble his army near Sombreffe within thirty-six hours. Though one might well bet 100 to 1 that the march of the enemy would be known more than thirty-six hours before his reaching the Sombreffe region, it was a very risky thing to *remain thus dispersed with an advance guard so close to one's main bodies* (at Charleroi). Such a situation would not have been accepted at all had it not been for the constant difficulties in supply raised by the Dutch authorities. But for this they would have concentrated their forces far more densely from the first."

Here we have Clausewitz soundly developing the whole theory of the time and space necessary to the operation of assembly, which time and space an advance guard is expected to provide.

Let us come to facts, so as to see how the system of forces thus organised actually worked.

Napoleon, intending to enter upon operations on June 15th, sends forward, on June 6th, the Fourth Corps from Metz; a few days before that, the First Corps from Lille; at the same time he screened these moves by reinforcing the outposts with a certain number of national guards. On June 8th he sent forward the Guard, from Paris, the Sixth Corps from Laon, and the Second Corps from Valenciennes.

On the 12th, he left Paris himself.

All these corps reached, on the 13th, the region between Philippeville and Avesnes; on the 14th they concentrated and distributed themselves into three columns: that on the right including the Fourth Corps and cavalry; that in the centre (including the Third Corps, the Sixth Corps, the Guards, the largest part of the cavalry) was in the region of Beaumont; that on the left, including the First and Second Corps, was near Solre-sur-Sambre.

These movements completely escaped the attention of the allies until the 14th, at which date they heard of the Emperor having arrived at the army, and of the French marching in order to concentrate. On receiving this first warning, Blücher orders, in the evening of the 14th, his Fourth Corps to assemble at once so as to be able to reach Hanut within one day's march.

It was only during the night from the 14th to the 15th that the whole truth was known from General Ziethen's reports; he saw the enemy reinforcing in front of him, he foresaw that he would be attacked on the following day. On receiving this new warning Blücher added, to the order already given General von Bülow, a new order to make for Hanut with all speed.

This second order reached General von Bülow on the 15th, at 11 a.m. If he had immediately ordered his troops to resume, after a short rest, their march towards Hanut, the Fourth Corps would have been assembled, in the night from the 15th to the 16th, on that point. General von Bülow thought he could postpone carrying out the order until the following day, the 16th. He reported accordingly. His report, however, did not find Blücher at Namur; no more than the orders sent out by Blücher on the 15th had found Bülow at Hanut,

where he was still under orders to remain on the evening of the 15th. The new order told him to continue his march on the 16th, with his army corps, from Hanut on to Sombreffe. As a matter of fact, had he carried out the orders received, the Fourth Corps might have been, in the night between the 15th and the 16th, at Hanut; from that point to Sombreffe the distance is still a good twenty-two miles; he might, on the 16th, have brought his advance guard there at about noon and the remainder of his troops in the evening, with much difficulty, of course, but in time to take part in the Battle of Ligny and maybe reverse its issue.

The Third Corps at Cinay, also, only received its marching orders on the 15th at 10 a.m.; it none the less arrived on the battle-field on the 16th at about 10; the Second had arrived without any difficulty.

Given a more regular system of communications, the concentration of the four Prussian army corps would have then been made in time, even starting from the dispersion which special difficulties of supply had made necessary. In any case, Blücher was able to bring to the battle-field, on the 16th, three corps (out of four)—that is, forces superior to those of the Emperor.

This result was due to his using an advance guard, the First Army Corps, capable of providing the time and space necessary to the contemplated operation—a concentration.

It was, further, by means of a running fight that this army corps managed to hold on for twenty-four hours in the presence of very superior forces without being destroyed.

Running fight is a phrase composed of two terms which are essentially contradictory. The more one retreats, the less one fights; the less one retreats, the more one has to fight. The First Corps had to retreat over a short distance, nine miles; it therefore had to fight several times. We shall see how it did it.

The order the commander of this corps had received from Blücher, dated Namur, 14th, 11 p.m., prescribed to him *to retreat on Fleurus, in case he should have to deal with superior forces; however, he must not lose sight of the enemy, but eagerly dispute the ground.*

In the first hours of the 16th, his forces were dis-

tributed as follows: His 1st brigade (Steinmetz) at Fontaine-l'Évêque, occupying Thuin (with one battalion of the 2nd regiment of Westphalian Landwehr); the 2nd (Pirch II) at Marchiennes (two battalions in outposts); the 3rd (Jagow) at Fleurus; and the 4th (Henke) at Moustier-sur-Sambre.

The line of outposts, in that part which is of interest to us, ran by Thuin, Ham-sur-Heure, Gerpinnes.

As we have seen, the French army had been ordered to move in three columns: the left column (Second Corps, Reille, and First, d'Erlon) by Thuin and Marchiennes; the central column (Third Corps, Vandamme, and Sixth Corps, Lobau, the Guard and the cavalry reserve, Grouchy), by Ham-sur-Heure, Jamioux, Marcinelle Charleroi; and the right column (Fourth Corps, Gerard) by Florenne, Gerpinnes, le Châtelet.

The Prussian outposts were attacked at about 4 a.m.; first of all those of the 2nd brigade of the First Corps. It was the light cavalry of General Domon, marching at the head of the central column, which thus appeared. The company on main guard at Ham-sur-Heure (4th of the F. of the 28th) being strongly assaulted and hard pressed by the French cavalry, was surrounded while retreating and compelled to surrender; three other companies of the same regiment assembled at Gerpinnes and managed to withdraw from there, under the shelter of the valley, from Gerpinnes on to le Châtelet.

Thuin was attacked at about the same time by the French column on the left. We have here two battalions, five squadrons, three guns, going into action against that place, which was occupied, as we have seen, by one German battalion. After about one hour's fight, the Westphalians, who have stayed too late at Thuin, are surrounded there; they attempt to force their way at the point of the bayonet over the Montigny plateau, two squadrons of the 1st Dragoons of Western Prussia try to receive them. Those squadrons are soon thrown back by the French cavalry; the battalion is partly wiped out, partly made prisoner. The destruction of this battalion must be ascribed to its having been late in leaving Thuin, as well as to the direction taken in retreat. By going along the steep

banks of the Meuse valley, it might without doubt have more easily escaped the attacking French cavalry.

While these events were taking place, General Ziethen, after hearing, during the night, of the impending attack, had called all his troops to arms and had ordered them to remain without movement, while he awaited reports from the outposts. He had not the slightest intention to resist with his main forces on the line of outposts. He only expected the latter to let him know the extent of the attack that was taking place. But this manœuvre soon met with a difficulty, that of withdrawing the troops on outpost duty. Cavalry are entrusted with the task of receiving them: at first the 1st regiment of dragoons were given this task, but the regiment had soon to be reinforced by other squadrons.

Ziethen received (between 6 and 7 a.m.) reports to the effect that the whole French army was advancing. The menace was mainly directed against his 2nd brigade. The latter received the order to avoid any kind of serious action; to this end they were to form another line of resistance on the Sambre, the crossings of which were to be occupied at Charleroi, Châtelet, Marchiennes, and then, later, to withdraw on Gilly.

The line of outposts of the 1st brigade had not been attacked (save at Thuin, where it had one battalion); in spite of this, the brigade received the order to withdraw: it took the direction of Gosselies, keeping in line with the 2nd so as to prevent the latter from being outflanked.

The 3rd and 4th brigades, the cavalry reserve and the corps artillery all met and took up a position at Fleurus. It will be seen later what use was made of them. They had become a reserve upon which to draw in order to facilitate the task of the troops in action.[1]

As for the latter, they successively (and on the whole front assaulted by the enemy) organised a number of resistances compelling the enemy to take up dispositions for attack. After the attack, thus prepared, had taken place, they abandoned the ground without seriously disputing it, so as to go and take up elsewhere the same disposition on a new line of resistance previously

[1] Where no *decision* is aimed at, there reappears the reserve, a *reservoir of force.*

occupied by echelons in the rear—towards Gilly, for the 2nd brigade, towards Gosselies for the 1st.

At 8 a.m. the French cavalry, after driving back all the outposts on the right bank of the Sambre, reached that river. They arrived, under Pajol, before Charleroi, coming from Marcinelles. A dam, and above that a bridge connected the village of Marcinelles with the town of Charleroi. The bridge had been barricaded. Being masters of Marcinelles, the French cavalry (4th and 9th chasseurs regiment) attempt at first to approach the dam and the bridge, they are repulsed by the fire from Prussian skirmishers. Later on (between 9 and 10), the attack is resumed by the 1st Hussars, which tries to assault the bridge; it is stopped by a heavy fire from the barricade. Infantry are needed to force that position. Pajol decides to wait. At about 11, the Emperor arrives with the bluejackets and the sappers of the Guard, as well as with the young Guard. Sappers and bluejackets rush on the bridge, carry the barricade and clear the road for Pajol's cavalry. The latter climb at a sharp trot the steep and winding street which traverses Charleroi from the south to the north.

The Prussian battalion at Charleroi had already withdrawn; it marched on in good order with a view to reaching the position of Gilly; the charges of the French cavalry did not succeed in doing it any serious harm.

While the central French column was thus attacking Charleroi, the left column was attacking Marchiennes. According to the Emperor's decisions, it ought to have occupied Marchiennes at 9. The stubborn resistance of the battalion at Thuin had, however, delayed the movement. It took that column, too, almost two hours to prepare the attack on the Marchiennes bridge. In short, it only carried the bridge at about noon, when Charleroi was already taken.

The retreating movement of the 2nd Prussian brigade on Gilly was, according to orders, to determine that of the 1st brigade towards Gosselies. In order to facilitate this retreat of the 1st brigade, Ziethen had detached in the morning a back echelon at Gosselies, namely, the 27th Infantry regiment (of the 3rd brigade) and the 6th Uhlans (of the army corps cavalry reserve). Soon after 12, these troops were in position (one bat-

talion in Gosselies, two in reserve behind), while the 1st brigade was beginning to cross the rivulet called the Picton. At that very moment, the French, debouching from Charleroi, were starting upon the pursuit; in the direction of Gillies, this was effected by the Pajol cavalry, followed closely by the young Guard; in the direction of Gosselies, by the 1st Hussars under Clary.

Colonel Clary, arriving at Jamet, attacked Gosselies; he was repulsed by the 29th regiment, while the 1st Prussian brigade, owing to the resistance of the 28th, finished its crossing of the Picton brook and reached Gosselies. As soon as the 1st brigade had gone through Gosselies, the 29th regiment retreated on Ransart. The first brigade, instead of continuing its movement in the direction of that place, decided to make a stand on the Gosselies road. It was soon attacked and thrown back by Colonel Clary, who had been reinforced by the advance guard of the Second French Corps coming from Marchiennes; it was cut off from Ransart, which the Girard division of the same army corps had just carried; it withdrew on Heppignies, covered by the 6th Uhlans and the 1st Hussars.

These events around Gosselies show what the difficulties of a retreating movement may be, as well as by what means such difficulties may be overcome.

There is a special danger lest the line of retreat be cut by the enemy's outflanking movements. The remedy is found in establishing to the rear a supporting force (29th Infantry, 6th Uhlans) which receive the retreating troops (1st brigade).

The facts give a good example of the way in which such a supporting force may prove useful. It held up Clary's cavalry until the 1st brigade got out of its difficult postion. Having done this, the supporting force immediately withdrew in order to occupy the important points on the line of retreat (Ransart, Ransart wood). The retreating body ought to have followed that movement without delay. It could not think of *stopping*, by means of a fight, very superior forces (Clary's cavalry reinforced by the Second French Corps); this is not the mission it has been entrusted with; moreover, it exposes itself to being destroyed or

to being cut off from its line of retreat by such superior forces.

This is precisely what happened. Steinmetz, once arrived at Gosselies with his 1st brigade, let go the rope (29th Infantry) which had been happily extended to him and which had saved him the first time. Instead of continuing to retreat on Ransart (which had been occupied by the 29th), he still remained in Gosselies, and prepared to fight a battle which, in the event, he lost; he was compelled to retreat again on Heppignies; he was cut off from the army corps by the French Girard division which had occupied Ransart. He found it difficult to rejoin his corps.

Events of the same order were happening at the same time on the road to Fleurus and Sombreffe via Gilly.

General Pirch II had been ordered to assemble his brigade at Gilly, to carry out a second resistance there, as that of the line of the Sambre had been broken.

We have already seen how he had progressively evacuated the points of Marchiennes and Charleroi, reducing his occupation of the Sambre in proportion as the enemy columns arrived. He similarly withdrew from Châtelet the 28th Infantry, which had occupied it at first, and replaced it by the 1st Dragoons of Western Prussia. He had thus assembled at Gilly the greatest part of his brigade at the moment when the French were entering Charleroi. The detachments at Marchiennes and Charleroi were the only ones he still had to withdraw.

Pirch II established his brigade behind Gilly, his front being covered by the muddy brook of the Grand-Rieux. Four battalions and the brigade battery were established on the slopes of the hills on the left bank of the brook, namely: the 2nd of the 58th north of the road, covered by Soleilmont Abbey; the F. of the 1st south of the road, reposing on a small wood; the F. of the 28th to the left rear of the preceding. To the right rear of the F. of the 1st, artillery (four guns) were on a small hillock south of the road; two other guns were between that point and the road; two others north of the road, firing on the exit from Gilly; the 2nd battalion of Westphalian Landwehr was in reserve, behind the artillery; and three battalions were also in

reserve, near the road to Lambusart (1st of the 28th, 1st and 2nd of the 1st regiment).

The retreating direction of the brigade was on Lambusart. In order to protect it from an outflanking attack which the French would not fail to carry out on Gilly and the road to Fleurus, that road had been barricaded with an *abatis* of felled trees.

The position thus occupied was covered, on the left, at Châtelet: by the 1st Dragoons of Western Prussia, also in charge of maintaining liaison with the brigade holding Farciennes; on the right by a cavalry post (one officer and thirty men) at Ransart, which General Steinmetz was to occupy. We have seen in consequence of what tactical mistake General Steinmetz had been cut off from Ransart and had thus disorganised these methodical dispositions.

This situation of the Prussian advance guard remained unchanged for the whole afternoon—until 6 p.m.

Pajol, after debouching from Charleroi at about noon, had marched on Gilly, where he was soon followed by the Exelmans cavalry division; the arrival of this numerous cavalry, united under Grouchy, had the result of deciding the Prussians to evacuate completely the immediate surroundings of Gilly village, where up to the last moment they had covered the main position north of the rivulet. Grouchy was not in a situation to attack this position with nothing but cavalry. He came back to Charleroi to report to Napoleon on the situation, while the young Guard was arriving before Gilly and while the head of Vandamme's column was reaching Charleroi. The time was past 3 o'clock.

Napoleon rode up himself in order to find out what the situation might be. In spite of the extension of the Prussian line—knowing, moreover, in what a state of dispersion a sudden attack always find an enemy—he did not think he had more than ten thousand men in front of him. He therefore ordered the enemy to be assaulted in front by one of the Vandamme divisions, supported by the Pajol cavalry division, while Grouchy with the Exelmans division should manœuvre the adversary by his left wing, which was the most approachable one.

An outflanking manœuvre is specially convenient

when attacking a rear guard, for the latter cannot fulfil its mission once it has been turned.

After giving these orders, Napoleon came back to Charleroi in order to watch the events taking place on the road to Gosselies, and to hasten (so it is said) the march of Vandamme's Corps. His absence brought indecision back into the minds of the French generals before Gilly; they believed themselves to be confronted by considerable forces. They had heard of movements made by troops of the 3rd brigade (Jagow) coming from Sombreffe. These were, so they thought, reinforcements coming up. Such news and the difficulty of reconnoitring through the wood delayed their action. It took them more than two hours to combine their attack. At about 5.30, Napoleon, feeling uneasy at not hearing the guns from the direction of Gilly, came up again in person. He felt no doubt either as regarded the enemy's state of surprise, or as regarded his state of dispersion, or, above all, as regarded the necessity under which he, Napoleon, found himself of advancing rapidly. He ordered the attack; it was nearly 6 p.m. A battery of sixteen French guns opened the attack. Then, all dispositions having been taken behind the Windmill hill, near Grand-Trieu farm, three columns debouched; that on the right went in the direction of the small wood occupied by the F. of the 1st; that in the centre left Gilly on its left and marched on the centre of the position; that on the left went to the north of that village. They were supported by Pajol's cavalry.

The Prussian battery soon suffered heavy losses from the fire of the French artillery. The skirmishers had come into action on both sides, when General Ziethen ordered General Pirch II to retreat. The Prussian battalions had no sooner begun this movement than they were charged by the French cavalry. It was the Emperor who had ordered General Letort to charge with the squadrons on duty near himself. Seeing that the Prussians were about to reach the woods and thereby to escape, he threw against them the very first cavalry to his hand. Letort did not take the time to collect his four squadrons, he started with those of the 15th Dragoons; the others were to follow as soon as they could. Crossing the brook north of the

road, then the road in front of the Vandamme columns, he struck the retreating Prussian battalions. The first to be assaulted were the F. of the 28th, who lost two-thirds of their numbers; then he assaulted the F. of the 1st, who were still 500 yards from the wood and who had time to form square and to open a regular fire: the charge of the French cavalry was already slowing down; the battalion succeeded owing to these favourable circumstances, in reaching the wood, the outskirts of which it occupied with one company, which thus prevented any kind of pursuit.

General Letort was mortally wounded in this affair.

Meanwhile the Exelmans division, debouching above Châtelet, had routed the 1st Dragoons of Western Prussia, and driven back a reserve battalion which had been holding Pironchamps wood. These cavalry attacks were joined by the Pajol division, which succeeded at last in outriding the Vandamme columns. The whole Pirch brigade was in retreat on Lambusart, where it vainly tried to take up a position again. The French cavalry did not leave them the time to do so. The brigade withdrew on Fleurus, then on Sombreffe. It was now free from attack. Night had come. The Vandamme Corps established its bivouac between Winage and Soleilmont wood, covered by the whole Grouchy cavalry established before Fleurus.

On the road to Brussels, Marshal Ney had halted the heads of his columns in a line with Gosselies, sending beyond that point, to Mellet, only one division (Bachelu) and the Piré light cavalry, detaching towards Quatre-Bras the lancers and chasseurs of the Guard. By the end of the day his most advanced troops were at Froesnes. The Prussian Steinmetz brigade (1st) had reached the road to Sombreffe by a circuitous road.

The losses suffered by the Prussians, at the moment when they undertook the retreat from Gilly, show well what difficulty troops experience in extricating themselves from an attack if they wait too long before beginning their movement. This necessity would nowadays be felt earlier, because modern arms extend their powerful effects to a far longer range.

In the morning of the following day, the 16th,

Grouchy informed the Emperor from Fleurus that strong columns, seemingly coming from Namur, were going in the direction of Brye and Saint-Amand, behind Fleurus. These were the Second and Third Corps, which were coming up to join the First. In spite of the absence of the Fourth Corps, the Prussians would be able to oppose during that day nearly 90,000 men, that is, forces markedly superior to those the Emperor could bring up.

The Ziethen Corps had suffered heavy losses, but attained a considerable result: that of *delaying* the battle until the 16th; of making concentration *possible*.

As Clausewitz puts it: "*One sees thereby what caution and what delay circumstances, however little complicated they may be, unavoidably impose even on the most resolute of generals, on Napoleon.*"

Among the complications which Ziethen skilfully utilised, must undeniably be placed that double retreat on the roads to Gilly and Gosselies, which prevented Ney from going to Quatre-Bras, which made Napoleon's intervention necessary on that side, and thereby also delayed the action on the road to Namur.

It must be also pointed out that this divergent retreat did not prevent the First Prussian Army Corps from having its four divisions assembled on the following day.

This instance clearly shows how retreating advance guards must fight, while keeping in mind the twofold task: *observing* the enemy and *delaying* him in his *approaches*.

Advance guards delay the enemy, by compelling him to take up fighting dispositions, to assemble, to deploy, to use his superiority in order to outflank.

The nature of the ground, as well as the distance of the force to be covered, determine of course how long the resistance must last; however, under any circumstances, the losses will depend upon the resistance one has decided to make. And it is also for this reason that resistance must not be resorted to, whenever the necessary time can be secured in another way.

Normally and rationally, therefore, one must attempt to hold the enemy back, and to delay him as he approaches, by three means only: (1) by compelling him

to be cautious, and, to this end, to moderate his pace; (2) by prolonging resistance on the spot as far as prudence allows it, but never more; (3) by carrying out the retreat as slowly as possible.

That retreat, which must be as deliberate and cautious as possible, must enable the troops to reform and establish themselves anew on the positions provided by the road taken. Action on positions and the retreating movement must therefore interpenetrate and prolong one another; the struggle must not end on a given point before it can be resumed, as methodically as ever, on a series of other points.

An advance guard succeeds in delaying the enemy in proportion to its strength; in order to compel it to withdraw, the adversary will need time to develop adequate means of action.

If figures are demanded, though they possess only a relative value, here are those which Clausewitz gives for his period, 1815.

An infantry division of 12,000 men, including some cavalry, and sent eighteen miles on ahead of the main body, may hold the enemy in check one and a half times the number of hours which would be required to cover that distance without fighting. Instead of ten hours, it will take the enemy fifteen hours to cover that distance.

The same division, at a distance of five miles from the corps to be covered, may hold the enemy in check for five or six hours, because it can send its reserves unsparingly in action.

In either case, it is very difficult for the enemy to begin the battle with his main forces by the evening of the same day. This means, then, that another night has been won for the concentration which the advance guard is covering.

The time the resistance may last, as given by Clausewitz, has obviously increased with modern arms, which compel the enemy to manœuvre from a greater distance.

To sum up: "*It is less by their action than by the mere fact of their being present, it is less by fighting than by unceasingly threatening to fight, that advance-guards fulfil their mission. They do not put a stop to the enemy's action, but they act like a pendulum; they make his movements slower and more regular and make it*

thereby possible to find out the mechanism and import of such movements" (Clausewitz).

We have seen the difficulties of a running fight: (1) the danger of being turned: once turned, the advance guard no longer covers the main body; it may, besides, be cut off; (2) the danger of being assaulted from too short a distance, which makes it very difficult to extricate the fighting troops; and (3) the necessity of fighting by fire and from a great distance, in order to act on the enemy at long range.

The arrangement of forces corresponding to these various conditions generally consists in having each of the successive positions occupied by a relatively strong body of artillery, in principle by all the guns available; and by infantry numbers proportionately sufficient to guard and support that artillery; while the remainder of the infantry prepare, and carry out the occupation of, the second position.

Numerous cavalry are also required to discover and parry outflanking movements. They usually form the reserve on each position taken.

Thus an advance guard consisting of six battalions, six batteries, six squadrons, will, as a rule, bring up to the first position its six batteries, two or three battalions, and its six squadrons, while the other battalions occupy the second position, where the artillery will join them at a trot after leaving the first position; finally, the cavalry covers the retreat of the last infantry elements from the first position and afterwards resumes its rôle of a general reserve.

In an advance guard manœuvring in retreat so as to cover a manœuvre of the main body, as well as in an advance guard going ahead in order to find and seize the enemy, a strong body of cavalry, supported by artillery and infantry, is a necessary part.

The proportion to be given to each arm varies, nevertheless, according to the distance up to which the advance guard has advanced; an advance guard at a short distance will increase its resisting elements (infantry, artillery), and diminish its cavalry; because information coming from very near is of little use, and because the available space allows of little retreating movement, but, on the other hand, compels one to fight. This was the case of the Prussian First Corps in 1815.

In either case, once the enemy has come on, battle begins if the manœuvre is ready and the concentration effected; the advance guard is then reinforced by a force capable of a lasting action: *artillery masses*. Under the shelter provided by this first disposition, the battle manœuvre begins.

II. Strategical Security as applied to the Situation of August 15th, 1870

To the Second German Army on August 15th, 1870, forty-eight hours were necessary, as we have seen, for concentrating while advancing and making for the left bank of the Moselle. How might that army have avoided, by complying with theory, the crisis which took place? This is what we shall now see. (See Sketches No. 10 and 11.)

In the morning of August 14th, 1870, the retreating French army had fully arrived under Metz: the battle of the day would not change anything in that situation. It would only succeed in delaying the retreat. Moreover, the main body of the French army had not been beaten. The Germans must therefore continue to guard themselves against it.

Direct pursuit of the French becomes impossible from that day, the 14th, in view of the protection provided for them by the fortified town of Metz.

In order to attack anew, it is necessary to envisage action on the left bank of the Moselle, and therefore, first of all, the crossing of that river, and this in the presence of an enemy who will still, for several days, be able to attack on either of the two banks.

Crossing the river is in itself an operation so risky as to make it imperative (while putting aside for the moment any scheme of an attack to be made later on towards the Meuse, or towards the road, or towards Metz) to obtain for the carrying out of such a crossing *all the security possible*.

What did the Germans know of the enemy? That he was near Metz on the 14th. If their desire was to complete the transference of the *main* forces of the Second Army to the left bank on the 16th or so, the operation might have involved the following dispositions.

(1) Transferring the crossing-point for the army to Pont-à-Mousson and above, at a distance which would allow a concentration of the army before it could be seriously assaulted by the enemy.

(2) Bringing the troops on the 14th and 15th towards those crossings, under the protection of *an advance guard on the right bank*, keeping in touch with the enemy; combining the march and the dispersion of forces with the resisting power of the advance guard; so that, should the enemy sally forth from Metz on the 14th or 15th, the army should be able to accept battle within twenty-four hours, on the right bank.

(3) No attack having been made by the enemy, throwing the army *by surprise*, on the morning of the 16th, on to the left bank of the Moselle, and this under the protection of a new advance guard on the *left bank*, which should provide the *time* and *space* necessary to carrying out the movement, to assemble the forces, and, if need be, to send them into action in case the French should attack on that day, August 16th.

Keeping this in mind: three roads might be utilised by, and allotted to, the Second Army in the following way:

Cheminot—Pont-à-Mousson	Third, Ninth Corps.
Nomeny—south of Pont-à-Mousson — Blenod (one bridge to be built)	Tenth, Twelfth, Second Corps.
Lixières—Dieubouard	Guard, Fourth Corps.

From the standpoint of march and time, the First Army would have been ordered to continue performing on the right bank the part of an advance guard; therefore it would have had a defensive mission, *during the 14th.* The various corps of the Second Army would have lengthened that day's march as far as possible so as to come up with the heads of their columns, thus:

Those of the first line, in the neighbourhood of the Moselle, namely:

Third at Cheminot;

Tenth at Pont-à-Mousson (concentrated); Twelfth, head at Atton;

Guard at Dieubouard.

Those of the second line: their heads of column in the rear of the preceding, marching by echelons.

All the forces would thus be on the right bank of the Moselle in a situation enabling them to concentrate, for battle, within twenty-four hours. Had an attack been made by the French, it would have borne first on the First Army; the latter would have been kept in position or would have manœuvred in retreat, according to the point reached by the Second Army's movement of concentration. Battle might take place with either or both armies.

During the 15*th*, the First Army, still performing the part of an advance guard, would have reached the region Fleury, Chesny, Courcelles; within the Second Army:

The corps in first line (Third, Twelfth, Guards) would have closed up on to their heads of column (depth from three to four miles);

The corps in second line (Ninth, Second, Fourth) would have closed up on to those in first line;

In the evening of the same day the corps in the first line, which had made a short march, would have resumed their movement at about 11 p.m. in order to cross the Moselle, an operation ended at 6 a.m. on the 16th. The corps in the second line would have started marching on the 16th at 5 a.m. towards the Moselle and finished crossing the river at noon. The whole army would thus have been on the left bank on the 16th by noon.

In order, however, to be sure to have the *time* and *space* necessary for carrying out that operation without risk, an advance guard would have been thrown on the left bank in the evening of the 15th.

To this end, the Tenth Corps, after concentrating at Pont-à-Mousson in the evening of the 14th, would have stood to arms in that town on the 15th at about noon, and, having been reinforced by the four cavalry divisions of the army, would have proceeded on Chambley in order to take up a position there *in advance guard on the left bank*, and to be able to guarantee for the Second Army the possibility of assembling all its forces on the left bank in the morning of the 16th.

Moreover, in proportion as the crossing of the Second Army should have approached completion, the necessity of keeping an advance guard on the right bank would have progressively disappeared. As a matter of fact, as early as in the evening of the 15th, the advance guard (First Army) at Fleury, Chesny, Courcelles

would have lost its *raison d'être*. That army, which had undertaken short marches only during the 14th and 15th, might have resumed its movement towards the Moselle in the evening of the 15th—first of all with its second-line troops. It would have crossed the river below Pont-à-Mousson, near Pagny, over bridges specially built for it, the security of which would have been guaranteed by presence of the Tenth Corps at Chambley.

In the morning of the 16th that army might have had two of its corps on the left bank, the third being kept on the right bank or withdrawn later on, without difficulty.

The Tenth Corps, on arriving at Chambley in the evening of the 15th, would have obviously sent forward occupying troops (important bodies of infantry; artillery; cavalry main guards) over all the dangerous roads, to Gorze, Vionville, Mars-la-Tour. The main cavalry forces kept in the neighbourhood of Xonville and Sponville, would have supplied an active scouting service on the front and, in the region more to the north, towards the road from Metz.

The main body of the army corps, having assembled in the region Buxières, Chambley, Hagéville, Saint-Júlien, etc., would have left a rear guard and its train on the Rupt-de-Mad near Rembercourt.

By proceeding thus, the situation on the right bank would have remained untouched during the 14th and 15th. As for the movement prepared in order to cross the Moselle, the enemy could not have perceived it before the night of the 15th. Such dispositions as he might have taken in order to impede the movement, having been decided on the 15th at night, could only have been carried out in the morning of the 16th, too late to prevent the army from crossing the river and concentrating if need be.

Should he have taken any dispositions before the evening of the 15th, the movement of the Tenth Corps would have disclosed them and enabled the commander-in-chief either to crush them or to meet them by taking new counter-dispositions. In any case that movement would have enabled the army to receive information of any impending danger and to avoid being *surprised*.

CHAPTER X

THE BATTLE : DECISIVE ATTACK

Lectures on the tactics of a single arm have described infantry in battle, cavalry in battle, artillery in battle. A study has thus been made of the various kinds of action termed : artillery action, encounter between numerous squadrons, advance guard actions, frontal attacks, feinting attack, preparatory attacks, decisive attacks, etc.

From this study, which confines itself to general description as regards the whole, but insists on minutely analysing and discussing the details, one may not have been able to deduce the logical connection between acts, the relations between causes and effects, which determine battle considered as a whole.

The conclusion may, indeed, have been drawn from such a form of study that battle is a fixed drama, conducted in the same way as those dramas we see on the stages of our theatres or even in life; a drama which derives its effect, its success, either from the refinement or abundance of details, or from a strongly emphasised climax, or from the characters put on the stage, or from the interest of a given thesis; in a word, from changing causes.

Others may have considered battle to be the development of a manœuvre, something like our autumn manœuvres; to be a methodical, successive use of arms so made that each should, in its own way and own zone of action, develop the whole power of which it is capable; such a methodical use having the object of producing a series of advantageous results and thereby a sum, or at any rate an excess of favourable results which are called victory.

Well, no ! Battle is not to be discovered in any of these conceptions. Far from being a sum of distinct and partial results, victory is the consequence of efforts,

some of which are victorious while others appear to be fruitless, which nevertheless all aim at a common goal, all drive at a common result: namely, at a decision, a conclusion which alone can provide victory.

Either there is a favourable conclusion or everything is lost: "In war, so long as something remains to be done, nothing is done" (Frederick). All battle-actions aim, therefore, at ensuring such a conclusion. Moreover, as there is *direction*, *convergence* and a *result*, it may well be assumed that logic governs here, that it asserts its full rights, that it imposes itself in its most ruthless vigour. There is such a thing as a theory of battle.

Let us study that event *the conclusion*, in itself, next the *manner* of securing it; we shall be then in possession of the general view which must direct the decisions of the high command, as well as the acts of the commanders of all ranks, if battle is to be well led and *conducted to a successful end.*

I

In order to reach its *end*—which is the imposing of our will on the enemy—modern war uses but one *means:* the destruction of the organised forces of the enemy.

That destruction is undertaken, *prepared*, by battle, which overthrows the enemy, disorganises his command, his discipline, his tactical connections, and his troops *as a force.*

It is *carried out* by the pursuit, in the course of which the victor utilises the moral superiority which victory provides over the vanquished, and tears to pieces, finishes off, troops already demoralised, disorganised, no longer manageable—that is, forces which are no longer a force.

What we are considering now is the act of war, the means of overthrowing the enemy and of securing victory.

Such was not the case with the actions we studied in the preceding chapter, the combats of an advance guard, a rear guard, or a flank guard—as, for instance, in the case of Nachod. All of these had but a limited end, to be separately determined on each occasion. They were preparatory to battle, they were not battle

itself, though they made a considerable use of force. At Nachod, the object, for the Prussian Fifth Corps, was to come out of the pass, to open the door for the Sixth Corps which followed it: for the Austrians, it was to prevent the Prussian corps from doing so. It is the same with all actions originated by the service of security.

In every one of these cases, the tactics to be adopted were entirely dependent upon the nature of the special goal to be reached, of the mission to be fulfilled, and this under well-determined circumstances of time and place.

Let us come to-day to battle which is the only *argument* in war, therefore the only end that must be given to strategical operations, and let us observe if there be not a tactical means of *overthrowing* the enemy, and if so, what that means may be.

Let us first of all establish this principle that, if it is wholly to fulfil the twofold object of being the *rational end* of strategical operations and the *efficient means* of tactics, battle cannot be merely defensive.

Under that shape, it may indeed succeed in holding up a marching enemy; it prevents him from reaching an immediate objective. Such results are, however, exclusively negative. Defensive battle never brings about the destruction of enemy forces; it never allows one to conquer the ground held by the enemy (which after all is the only external sign of victory), therefore it is unable to create victory.

Such a *purely defensive* battle, however well conducted, does not make a victor and a vanquished. The game has to be begun all over again. A purely defensive battle is a duel in which one of the fighters does nothing but *parry*. Nobody would admit that, by so doing, he could succeed in defeating his enemy. On the contrary, he would sooner or later expose himself, in spite of the greatest possible skill, to being touched, to being overcome by one of his enemy's thrusts, even if that enemy were the weaker party.

Hence the conclusion that the *offensive* form alone, be it resorted to at once or only after the *defensive*, can lead to results, and must therefore *always* be adopted—at least in the end.

Any defensive battle must, then, end in an offensive action, in a thrust, in a successful counter-attack,

otherwise there is no result. Such a notion will seem to some elementary; still it cannot be omitted without all the ideas one ought to hold on war becoming confused. This idea was ignored by the French army of 1870, otherwise they would not have given the name of a victory to the battles of the 14th and 16th of August, 1870, and others which *might have become victories*, but certainly did not deserve that name at the stage in which they were left. To use a term current at the time, " positions had been maintained," and no more. Nothing could be expected to come of such battles. *Maintaining a position* is not synonymous with being victorious; it even (implicitly) prepares defeat if one stops there, if an offensive action is not resorted to.

Hence the following moral:

In tactics, *action* is the *governing rule* of war.

" To make war always means attacking " (Frederick).

Of all faults, only one is ignominious, *inaction*.

We must therefore constantly try to create events instead of submitting to them, and to organise attack from the first, the rest being subordinate and having to be considered only from the standpoint of the advantages which may result for the attack.

Once the necessity of the offensive has been granted, does battle, henceforth considered in its *raison d'être*, of itself and in its original nature—*fighting* in order to *defeat*—involve a certain conduct, a reasoned use of troops, a rational kind of tactics?

Should the result flow from a large number of single fights, of individual fights, of fights between units (between individual men, between companies, between battalions), or, on the contrary, from a well-determined *combination* of forces, which it should be possible to grasp, which contrast several totals of well-determined efforts, working together in one or more directions, with a mass of ill-ordered individual efforts? Before answering this question, let us remember Napoleon's saying: " Two mamelukes could hold their own against 3 Frenchmen; but 100 Frenchmen did not fear 100 mamelukes; 300 would beat an equal number; and 1000 would beat 1500—so great was the influence of *tactics*, *order* and *manœuvres*." Individual valour in the rank and file is, then, insufficient to create victory. From being

decisive in the elementary origins of combat, it gradually loses its influence, its weight, in proportion as the numbers employed increase. Had Napoleon developed his thought, he would have told us that at the battle of the Pyramids, a handful of Frenchmen, commanded by him, had conquered about 30,000 of these Orientals, though the latter were quite as valiant as, and even individually superior to, the French.

What is it, then, that determines the result? What is it that provides victory?

Tactics, Order, Manœuvre.

There are such things as advantageous tactics and rational fighting dispositions, that is, a combination of forces set up by the commander. The influence of that commander, of that directing mind, soon becomes considerable and decisive; it gets the better of the sum of individual valour whenever the numbers of the fighters is large, as, for instance, at the Pyramids. Let us learn a lesson from this. In the presence of such a situation, let us admit self-examination and confirm our conclusions.

We, the French, possess a fighter, a soldier, undeniably superior to the one beyond the Vosges in his racial qualities, activity, intelligence, spirit, power of exaltation, devotion, patriotism: he is the mameluke as opposed to the French cavalrymen.

If we are beaten, it will be due to the weakness of our tactics. Let us then find, and provide our soldiers with, those tactics which get the better of *numbers* and *valour* as at the Pyramids; which will doubly enable us to get the better of an army the individual valour of which is inferior to our own.

In what direction shall we look for that combination the existence of which can no longer be disputed? Is that combination to consist in attempting to inflict a high total of losses on the enemy? in doing him the greatest possible harm by opposing to him better guns, better rifles, or more guns and more rifles? Shall our combination attempt to secure a superiority through physical effects, or shall it, on the contrary, try to attain the result by means of effects of a different kind? This is what we shall settle after analysing the psychological phenomenon of battle.

"One hundred thousand men suffer ten thousand casualties and confess themselves beaten: they retreat before the victors who have lost as many men, if not more. Moreover, neither the one side nor the other knows, when retiring, either what numbers they have lost themselves or what the casualties have been on the opposite side" (General Cardot). It is not, therefore, the physical fact of having sustained losses, still less a comparison between losses, which makes them yield, and withdraw, give up fighting, abandon to the enemy the disputed ground the conquest of which marks the beginning of victory.

"Ninety thousand vanquished men withdraw before ninety thousand victors merely because they have had enough of it, and they have had enough of it because they no longer believe in victory, because they are *demoralised*, because their *moral* resistance is exhausted" (General Cardot), (merely *moral:* for the physical situation is the same on both sides). It was with this in his mind that Joseph de Maistre wrote: "A battle lost is a battle one thinks one has lost; for," he added, "a battle cannot be lost physically." Therefore, it can only be lost morally. But then, it is also morally that a battle is won, and we may extend the aphorism by saying: *A battle won, is a battle in which one will not confess oneself beaten.*

Von Brack, Frederick being already dead, was passing by an old castle in Silesia. A coat of arms stood on the door: two stags fighting each other and the motto: *The more stubborn conquers.* "Here is the true source of success," said that man of arms. *Victory* means *will.*

Concerning this capital importance of moral in war, concerning also the nature of the cause which determines a decision, an issue, more particularly in battle, innumerable proofs and quotations might be advanced. Let us be content to recall Bugeaud who, in his narrative of thé battle of Arly, shows us the enemy in flight without a single shot having been fired, merely because troops advanced.

"O moral Power," he concludes, "thou art the prince of armies!"

"Demoralisation," says General Cardot, "is the ultimate end, the efficient cause and true explanation of

success. . . . The decisive victory, the true victory, is bound to be a moral victory."

Von der Goltz adds to this: "It is not so necessary to *annihilate the enemy combatants* as to *annihilate their courage*. Victory is ours as soon as the enemy has been brought to believe that his cause is lost." And again, somewhere else: "An enemy is not to be reduced to impotence by means of complete individual annihilation, but by *destroying his hope in victory*."

Frederick sums this up in one word: "*To conquer is to advance*."

"But who advances? The one whose conscience and countenance compel the other to withdraw" (De Maistre).

Therefore: War = the domain of moral force. Victory = moral superiority in the victors; moral depression in the vanquished. Battle = a struggle between two wills.

In order that our army be victorious, it must have a moral superior to that which the enemy possesses or receives from his commander. To organise battle consists in enhancing our own spirit to the highest degree in order to break that of the enemy.

The will to conquer: such is victory's first condition, and therefore every soldier's first duty; but it also amounts to a supreme resolve which the commander must, if need be, impart to the soldier's soul.

Here appears the necessity, for an army which desires to conquer, of being provided with a factor of the first order, *command:* as well as the necessity, in the man who would undertake battle, of possessing a certain gift: that of *commanding*.

To think and to will, to possess intelligence and energy, will not suffice for him; he must possess also the "imperative fluid" (De Brack), the gift of communicating his own supreme energy to the masses of men who are, so to speak, his weapon; for an army is to a chief what a sword is to a soldier. It is only worth anything in so far as it receives from him a certain impulsion (direction and vigour).

"The Gauls were not conquered by the Roman legions, but by Cæsar. It was not before the Carthaginian soldiers that Rome was made to tremble, but before Hannibal. It was not the Macedonian phalanx which

penetrated to India, but Alexander. It was not the French army which reached the Weser and the Inn, it was Turenne. Prussia was not defended for seven years against the three most formidable European Powers by the Prussian soldiers, but by Frederick the Great."

These are Napoleon's words. What would he not have written, and still more rightly, had he included in his enumerations that dazzling period of history, the fascinating memory of which will live through future centuries under the name of "the Napoleonic epic," and to which he gave all its life by his own gigantic personality!

Great results in war are due to the commander. History is therefore right in making generals responsible for victories—in which case they are glorified; and for defeats—in which case they are disgraced. Without a commander, no battle, no victory is possible.

Let us remember, besides, what Scharnhorst so rightly said when Blücher was appointed commander of the army of Silesia in 1813: "*Is it not the manner in which the chiefs fulfil that task* (*commanding, imparting a resolve to other men's hearts*), *which makes them true warriors, much more than all other abilities or faculties theory may require from them?*"

Facts were soon to vindicate the soundness of this appreciation of Blücher, whom courtiers were still calling an imbecile and a sick old man, an embodiment of impotence; although—owing to his influence over the country—he was to his fellow-citizens the very embodiment of patriotism and had taken in hand all national claims; although—owing to his popularity within the army—he had conquered the soldier's love by constantly attending to the soldier's interests and was able to request, undertake, attain anything. Reposing on so considerable an influence, this man who dared to face the French Cæsar—a man of a little mind, but of a will, of a passion which would never tire and would never lay down arms—was to draw whole nations into the war and lead his armies to victory, just as he was to carry to Paris the sovereigns of Europe, and this in spite of themselves—at least, as regarded one of them, the Emperor of Austria, who did not desire to dethrone his son-in-law and to make his daughter a widow, and a

widow without a crown. Was there not in all this will, impulsion, commanding ability, such as to justify Scharnhorst's appreciation?

Is it not again this influence of the commander, the very enthusiasm derived from him, which alone can explain the unconscious movements of human masses, *at those solemn moments when, without knowing why it is doing so, an army on the battle-field feels it is being carried forward as if it were gliding down a slope* (*terms used by eye-witnesses*)*?*

It is, moreover, easy to perceive why such an influence is necessary. Let us come to that point. When the moment comes to take decisions, face responsibilities, enter upon sacrifices—decisions which ought to be taken before they are imposed, responsibilities which ought to be welcomed, for the initiative must be secured and the offensive launched—where should we find a man equal to these uncertain and dangerous tasks were it not among men of a superior stamp, men eager for responsibilities? He must indeed be a man who, being deeply imbued with a will to conquer, shall derive from that will (as well as from a clear perception of the only means that lead to victory) the strength to make an unwavering use of the most formidable rights, to approach with courage all difficulties and all sacrifices, to risk everything; even honour—for a beaten general is disgraced for ever.

"It is difficult to appreciate correctly what *moral strength* is required to deliver—after having completely thought out the consequences—one of those great battles upon which the history of an army and of a country, the possession of a crown depend." So wrote Napoleon. He added that, "generals who give battle willingly are seldom found"; and "a morally strong personality must be understood to mean not one who is only possessed of strong emotions, but one whose balance is not upset by the strongest possible emotions" (Clausewitz).

Let us salute, too, that sovereign power of the commander, just as he will be saluted by drums and bugles when appearing on the battle-field; a power necessary to the organisation of the whole, of a final thrust, and alone capable of thus fixing fortune.

Let us at the very beginning of our study, make a

note of that factor of the first order; the commander's personal action. No victory is possible unless the commander be energetic, eager for responsibilities and bold undertakings, unless he possess and can impart to all the resolute will of seeing the thing through; unless he be capable of exerting a personal action composed of will, judgment, and freedom of mind in the midst of danger. These are natural gifts in a man of genius, in a *born* general; in an average man such advantages may be secured by means of work and reflection.

In order to manifest itself, such a personal action requires the *temperament of a chief* (a gift of nature), ability to command, inciting power, which teaching cannot provide.

The effects of that personal action are numerous, for by using such gifts (natural or acquired), it finds in the most *unlimited* use of forces a means of increasing the efficiency of such forces; it also transforms its instrument, giving birth, as it were, to officers and troops, *creating* an ability and devotion which, failing such spark or impulsion from above, would have remained sunk in mediocrity.

This task of the commander becomes an immense one where modern numbers are concerned. It is, indeed, seldom possible for a single man to fulfil it; several men are needed. This is the new conception which the French Revolution brought into war, by making the personal initiative of subordinate chiefs (all working in the same direction and complying with the same doctrine) concur in setting up a complete direction of armies. It became, at any rate, a fully developed reality with the German armies of 1870.

In the presence of this factor—command—theory must humble itself. The finest schemes are of no avail without the qualities which execution requires of the directing mind. Theory may nevertheless maintain its right to observe, to analyse, to conclude, to lay down the bases of truth, by studying how a commander-in-chief, especially if he is a genius, proceeds: if only in order to walk in his footsteps.

Theory immediately deduces a number of corollaries from the principles we have just established.

For example: If the will to conquer is necessary to

offering battle with any chance of success, it is criminal in the commander-in-chief to deliver or accept battle without possessing that superior will which must provide direction and impulsion for all.

And if battle is thrust upon him by circumstances, he must decide to give battle, to fight, in order to conquer in spite of it all.

On the other hand, one must not fight for the sake of fighting. "Battles concerning which one cannot say *why* and to what purpose they have been delivered are commonly the resource of ignorant men" (Maréchal de Saxe).

However obvious these points may be, they seem to have been overlooked during the tragic periods of our history.

E. g.: the great battles round Metz (16th, 18th, and 31st August, 1870), in which we see an army fighting bravely without its chief desiring to secure victory. How could victory be thus secured?

As a matter of fact, the great events of history, the disasters it relates from time to time, such as the collapse of French power in 1870, are never accidental, but result from superior and general causes; from forgetting the most elementary moral and intellectual truths, as well as from relaxing that activity of mind and body which is the very life and sanity of armies. Therefore, if one wishes to grasp the notion of war fully, it is by no means useless to grasp its vital principles at the outset.

II

Granted an army provided with a true commander, how is it to *break* the enemy's spirit? To what actions should war, "the domain of moral force," lead us?

In order to be able to answer that question, it will suffice to discover in what a moral impression consists, how it is created.

"Whatever a thing may be," writes Xenophon, "be it pleasant or terrible, the less it has been foreseen, the more it pleases or frightens. This is seen nowhere better than in war, where *surprise* strikes with terror even those who are much the stronger party."

He well mentions *terror*, "that cold deity, Fear.

Not the womanly fear that flies shrieking. It is permitted, it is even necessary, to regard such fear as impossible, although it is not a phenomenon altogether unknown. What we mean, however, is *that other, much more terrible fear, which can enter the most manly heart, chill it, and persuade it that it is vanquished*" (J. de Maistre).

The means of breaking the enemy's spirit, of proving to him that his cause is lost, is, then, surprise in the widest sense of that word.

Surprise bringing into the struggle something "unexpected and terrible" (Xenophon); "everything unexpected is of great effect" (Frederick). Surprise depriving the enemy of the possibility of reflection and therefore of discussion.

Here we have a novel instrument, and one capable of destructive power beyond all knowledge. However, one cannot obtain this at will; setting an ambush, attacking in reverse, are possible in a small war, but impracticable in a great one; it is necessary, therefore, to resort in case of great wars to bringing forth a danger which the enemy shall not have the time to parry or which he shall not be able to parry sufficiently. A destructive force must be made to appear which should be known, or seem, to the enemy to be superior to his own; to this end, forces and thereby undisputable efforts must be concentrated on a point where the enemy is not able to *parry* instantly, that is, to answer by deploying an equal number of forces at the same time. Such will be our conclusion.

To surprise amounts, then, to crushing an opponent *from a short distance* by *numbers* in *a limit of time;* otherwise, the adversary though overtaken by numbers retains the power to meet the attack, to bring up his reserves, in which case the assailant loses the advantage of surprise.

He loses the same advantage, if surprise starts from a *great distance*, for the enemy may then, owing to the range and delaying power of modern arms, regain the time to bring up his reserves.

Such are the conditions of *numbers*, *time*, *space*, military action must fulfil in order to contain these elements of *surprise* which are necessary to the destruction of the enemy's spirit.

Hence the *superiority of manœuvring armies*, which

alone are capable of quickness and nimbleness in preparing *an attack;* launching it *at short distance*, and carrying it out *quickly.*

One similarly perceives the common intentional features possessed by the attacks in flank of former generations; the oblique order of Frederick; the "event" of the Napoleonic battle, and the decisive (generally enveloping) attacks of modern battle.

Under these various shapes there appears a development of this common idea of a *surprise;* the idea of trying to produce among the enemy the same moral effect—terror; of creating in the enemy's mind, by suddenly using unexpected and undeniably powerful means, a feeling of impotence, the conviction that he cannot conquer, that he is vanquished.

To break the enemy's will: such is the first principle we derive from our study; to break it by means of an unexpected and supremely violent stroke—such is the first consequence of that principle.

Such a supreme and unexpectedly violent stroke need not necessarily bear on the whole enemy army. That army is a living and organised being. Now an organism is a set of organs, the health and good condition of all in which are necessary to the individual's life. A loss in them—be it but the loss of one of them—brings about death.

To beat an adversary, it is not necessary "to sever his arms, his legs and his head, pierce his chest and burst open his belly all at once" (General Cardot). One sword thrust to the heart, or one stunning blow on the head ensures the result. It is enough to overthrow the wing of an army, its centre—any important part of the whole—to ensure the result.

An army is, moreover, a delicate being kept alive by discipline. "Discipline is the strength of armies," they say. It is much more; it is the very first condition of their existence. Discipline alone, owing to hierarchic organisation, and to the transmission and execution of orders resulting therefrom, permits a commander to direct any action.

Therefore, to break the chain is to put a stop at once to the functioning of all ranks; to transform tactical units into mere masses of men; to make execution of orders impossible; to annihilate the commander's will;

to prevent any action from taking place. In order to break it, all you need do is to spread moral disorder or physical disorder; to overthrow the organisation on *one point* of the system.

All this reasoning leads us to striking *one supreme stroke* on *one* point. Napoleon expressed this when he said that it is necessary and sufficient, in order to secure victory, "to be the stronger on one given point at one given moment." He abundantly proved this truth by his own way of conducting battle: "Whether we tear away or merely lift the veil which, in Napoleon's battles, covers all the delays he needed for finding his way, or for the arrival of a neighbouring corps, or for carrying out a movement, one always sees at last the decisive attack: masses entering upon the stage with full fury and full tragedy of action" (Clausewitz).

Napoleon was explaining this very idea when he wrote to Marshal Gouvion-Saint-Cyr. "No preference must be given to any kind of attack; one must act according to circumstances. After sending into action the *various corps nearest* to the enemy, one must leave them alone, without troubling over-much about their favourable or unfavourable chances. Only one must be careful not to grant too easily any request for help which may be made by their commanders."—"He added," said the Marshal, "that it was only at the end of the day, when he found that the tired enemy had brought into action the greater part of his forces, that he collected whatever he might have kept in reserve, so as to hurl on to the battle-field a *strong mass* of infantry, of cavalry, of artillery; as the enemy *had not foreseen this*, he (Napoleon) was then in process of creating what he called '*an event*,' and, by that means, he almost always secured victory."

Let us bear in mind, from the above, the conception in which is summed up all battle; the idea of a manœuvre ultimately leading to an *intentional, resolute, sudden and violent action of the masses* on a *selected point.*

This idea is again found in the battles at the close of the Empire. We then find those heavy, massive, misshapen columns of Macdonald's troops at Wagram, of General d'Erlon's troops at Waterloo, which are obviously opposed to detailed tactics, and to the art of

making the best possible use of a given number of troops, or of getting out of them all the effects of which they are capable. None the less such formations betray the Emperor's mind. They are the very embodiment of his theory of *event*—but of that theory carried to excess and violence. As a principle of war, such a tactic presents a sort of exalted violence: if you look at it in detail it seems absurd. Surprise, at any rate, is pushed in such a scheme to its utmost limits. This is so true that when the Archduke Charles saw, on the battle-field of Wagram, that formidable machine of attack, the Macdonald column, advancing, he felt he could not parry the blow and immediately ordered a retreat.

Napoleon realised thoroughly that you cannot demoralise and overthrow a strong enemy by resorting to an open order, to skirmishers, to lines, even when making a general attack.

In order to get the better of the enemy, to make him confess himself vanquished, he produced an *unexpected* effort, an effort of an unknown and, so to speak, unheard of violence; to this end he made use of masses, and, in order to be sure of their effect, he organised these masses *in column.*

War is like all other human activities. In the presence of new difficulties, of increasingly important obstacles, it returns to its origins, to its own primitive nature, which is wholly made up of violence; it seeks a means of more efficiently *surprising*, in order more efficiently to *overthrow* the enemy; to break his spirit more thoroughly. Keeping this in mind, Napoleon constantly reinforced the simplicity, the crudity, the violence of his attacks.

Decisive attack is the supreme argument used by modern battle, which itself is a struggle between nations fighting for their existence, for independence, or for some less noble interest; fighting, anyhow, with all their resources and passions. These masses of men and of passions have to be shaken and overthrown.

If we study in detail the attack of that Macdonald column just mentioned (which includes all the *phases* of the *tragic act* of battle) we should find its attack:

(1) Prepared (*a*) by a charge of 40 squadrons (the object of which was to make it possible for the attacking

column to assemble); (*b*) by fire from 102 guns (in order to halt and shake the enemy).

(2) Carried out by 50 battalions (22,500 men).

We should find that mass of infantry unable to act by fire, in view of the formation it has taken; unable to use the bayonet. The enemy nowhere awaits the shock. Finally, it does no harm whatever to the adversary; on the contrary, it suffers a great deal itself; it was reduced to 1500 victorious men when it reached its objective, Süssenbrunn.

In summing up, we should find that this *decimated* force was able to beat the *decimating* one; moreover, this decimated force determined the forward movement of the whole army, the victory on the wide Marchfeld.

This result was secured not by physical means—these were all to the advantage of the vanquished—it was achieved by a purely moral action, which alone brought about decision and *a complete decision.*

III

To such a battle-manœuvre characterised by one supreme effort, a decisive attack which achieves *surprise*, has often been opposed *parallel* battle or battle of *lines*, in which one goes into action at all points, and in which the commander-in-chief expects a favourable circumstance, or a happy inspiration (which are not usually forthcoming) to let him know the place and time when he must act;—unless he leaves all this to be decided by his lieutenants, while the latter, again, leave this to their own subordinates. So that in the end the battle is won by the privates: an *anonymous battle.*

History has often decided in favour of that theory; it has shown that such a battle has existed, that it was often put in practice and followed by victory. Nothing would be less astonishing in an army such as ours. In such an army (where the fundamental qualities of our race place at random in any rank of the hierarchy, among petty commanders, as officers commanding a regiment, a battalion, a company, or even among the rank and file, treasures of initiative, of valour, of spontaneity, so long as these are not artificially suppressed) it is not surprising that success should result from the natural manifestation of such qualities, rather than from the actual

intervention of a commander-in-chief organising a combined distribution of forces, a combat on a front, a decisive attack.

In all lotteries there are fortunate men who draw prizes; in spite of this, it will occur to nobody that buying a ticket in a lottery is an investment. Certain causes which are independent of our wills, among which are chance and successful initiative, sometimes settle and determine events: that cannot be denied. But it is not possible to rely on them, it is even less possible to make them the bases of a policy.

Let us analyse this theory of "the parallel battle." What do we discover?

Troops go into action everywhere; once in action, they are supported everywhere. In proportion as forces are used up, they are renewed, and replaced. Such a battle consists in putting up with a constant, a successive, wear and tear, until the result ensues from one or more successful actions of particular combatants—subordinate commanders or troops. Such actions all remain second-rate, because their decision never involves more than a portion of the forces engaged. As for the whole, it is but a chain of more or less similar combats, in which command is broken up, has to specialise the means of action in detail, and in which the issue must proceed from a sum (or excess) of successful local results which escape the direction of the commander.

This is therefore a battle of an inferior kind when compared to the battle of manœuvre which makes an appeal to the commander-in-chief's action, to his manœuvring ability, to a sound and combined use of *all* the forces present; which achieves a true economy of those forces, by attempting to concentrate effort and mass on one selected point and neglecting all else; which remains to the very last a combination—due to one command—of combats varying in intensity, but all aiming in the same direction to produce a final resultant: an *intentional, resolute and sudden action of masses acting by surprise.*

The parallel battle uses inferior methods, and is bound to lead to inferior results.

Its weakness lies in the fact that attack, in such a battle, develops everywhere with equal force, and ends by exerting a *uniform* pressure against a defender who

in his turn offers a *uniform resistance;* a resistance which, however, is more efficient than the pressure, because the defender disposes of special advantages such as shelter, fire-power, etc., which the assailant does not possess to the same degree.

Such a battle means bringing up forces piecemeal; it soon amounts to throwing drops of water into a sea.

We have a wave breaking against a strong dam. The dam will not be broken.

Suppose, however, we should, as a result of some mental vision, discover a crack in the wall of the dam; a point of inadequate resistance. Or again should we manage, by means of a particular combination of forces, to add to the rhythmical and methodical action of the wave some kind of water-hammering capable of breaking the wall of the dam on some one point, *then* the balance would be upset; the mass would rush in through the breach made, and carry the whole obstacle. Let us look for the crack, for the point of inadequate resistance, or let us organise to this end our water-hammering on one point of the enemy line; we shall thus attain the one result.

That is the "battle of manœuvre."

Defence, once it has been overthrown on one point, collapses on all. Once the resistance has been pierced, the whole line falls.

Mechanics as well as psychology leads us to the "battle of manœuvre." The means provided by the first consist *in applying superior forces on one point;* the means provided by the latter consist *in producing a peril, an attack that cannot be parried.*

By either road, we come in the end to decisive attack.

Such an attack is necessary, because otherwise nothing is really *achieved,* and we are relying on nothing but chance.

It is *adequate,* because, as soon as it has succeeded, the result is attained.

Theoretically *a well-conducted battle is a decisive attack successfully carried out.*

Theoretically too, in order to be stronger than the enemy on a given point and at a given moment, *all* forces must be *simultaneously* applied on *that* point, and this in an *unforeseen* manner.

When we turn to practice, we shall see that such a necessity involves other necessary things; the notion of security will reappear and impose sacrifices, and absorb forces.

In order to direct the attack, to guard it from enemy undertakings, to prevent the enemy from undertaking the same manœuvre, we shall have to support a great number of combats, each of which must have a well-determined end. Let us nevertheless consider it settled that, decisive attack being the keystone of battle, all other actions which battle involves must be faced, considered, organised, supplied with forces, only in so far as they prepare, facilitate and guarantee the development of the decisive attack, which is characterised by *mass, surprise, speed;* in view of which, therefore, the *maximum* of forces and of *manœuvring* troops must be *kept in reserve.*

Hence the *economy* of forces, that is, their distribution and use in battle.

IV

The difference between the battle of manœuvre and the parallel battle does not consist only in a difference as to the issue: such an issue being, in the first case, prepared, sought, reached by means of a decisive attack, while, in the second, it is rather expected in a successful action springing up on one or more undetermined points of the front. They also differ radically in respect of *conduct, execution, economy of forces.*

It is important to establish this point, for even though parallel battle be theoretically put aside, one comes back to it unless a *plan* of the battle, concerning first of all the *decisive attack*, has been strongly set up and made a basis for the combination of forces.

In the parallel battle, tactics attempt, consciously or unconsciously, to break the other party's resistance by slowly and progressively using up enemy forces. To this end, fighting is kept up everywhere. It is fed everywhere. Reserves are devoted to this *supporting* task. Reserves become a kind of reservoir of forces from which one draws what is necessary to making up the wear and tear which continues and must be repaired. Art consists in still keeping a reserve up to the point where the

enemy has none left, so as to be able to have the last word in a struggle where wear and tear is the only valid argument. In such a battle, however, reserves have no place allotted to them beforehand; they have to be everywhere, so that it should be possible to use them according to our needs, that is, to continue the action on the whole front. They afterwards scatter and melt away in a combat where a favourable circumstance is always hoped for, without it being known where and when such a circumstance may be found, and where their only effect is to prevent the struggle from coming to an end.

In the battle of manœuvre, on the other hand, the reserve is a *club*, prepared, organised, reserved, carefully maintained in view of carrying out the one act of battle from which a result is expected—the decisive attack. The reserve is spared with the utmost parsimony, so that the instrument may be as strong, the blow as violent as possible.

Such a reserve must be hurled in the last instance, without any thought of sparing it; with a view to carrying by force a selected and well-determined point. It must therefore be hurled as one block, in the course of an action exceeding in violence and energy all the combats of the battle, under the conditions demanded by *surprise*, *mass*, and *speed*. We envisage a single goal; a *determining act* in which *all* our forces take part, either in order to *prepare* it, or in order to *carry it out*.

Thus is convergence of efforts achieved; thus is their resultant applied to the objective given, to the decisive attack, which is the supreme argument. All this is a mere development of that principle of "economy of forces" which, instead of specialising credit, of subdividing resources in a fixed and unvarying way, puts them in connection with each other so as to pour them out in one single direction (that of the result desired) at a given instant.

One historical instance will show clearly the difference between the two schools. The scene took place at Abukeer, during the battle. Bonaparte was dictating an order to his Chief of Staff, Berthier (a man who kept everything in mind, and particularly the filling up of blank order forms). Bonaparte stopped, and Berthier asked him what troops he desired to form the reserve.

"*Do you take me for Moreau?*" answered Bonaparte. There was obviously no such a thing in his mind as a *necessary* reserve. Troops must be reserved, but only in order to manœuvre and to attack with more energy than the others. Such was the use of forces he had been led to by the idea of an attack which must, in the last result, exclude *any* reserve, *any* caution.[1]

This difference in the way of using reserves is so deeply rooted in both forms of battle (the parallel battle and the battle of manœuvre) that some have gone so far as to regard it (though in a superficial way) as the *only* difference, the *only* distinction between them. As a matter of fact, the distance between them is very great.

The notion of a parallel battle was the ruling one in the French army of 1870; or rather it was an *absence of notion* regarding the conduct of battle as a whole. Adequate proof of this may be derived from official and private narratives recording the struggles of that time. The Germans are always supposed to have achieved victory, because numerous reinforcements came up, as though these numerous reinforcements had not been troops reserved and brought up in the numbers and in the time required to produce that demoralising effect which overthrows an army!

This way of putting things shows clearly enough that, if such fresh troops had arrived on *our* side, they would have been used as *reinforcements*—not as a means of undertaking a special and decisive action which no one contemplated.

As in the battle of manœuvre (the superior form of battle, for it implies making the most complete possible use of one's forces) the decisive attack is the necessary and adequate condition of success, and the rest is secondary; the smallest possible forces must be devoted to

[1] "One often speaks of the usefulness and necessity of *strong reserves*. That dogma is closely connected with the theory of progressive consumption of forces: it is held to be a sacred dogma. Thus one often sees, on manœuvres, large infantry masses attacking though deploying only a small number of rifles. The whole of the remainder follows in close order, with drums beating, and hurrahs, as if such means would drive the enemy away. All reserves are dead forces. . . . Reserves are only useful under the condition that they should come into action. . . . One may even imagine a case where one might conveniently abstain from setting up a reserve; such would be the case if one exactly knew the strength of the enemy and if the latter had already completely deployed."—Von der Goltz.

that subsidiary part of the task, and the use to be made of those subsidiary forces must only be considered in so far as it prepares the decisive act.

Nevertheless we must acknowledge that, besides the ultimate execution of that decisive attack, such an attack must be:

(1) Well directed by means of scouting;

(2) Secondly, prepared; and,

(3) Thirdly, protected and utilised; in view of the enemy being otherwise able first to conceal his disposition; secondly, to alter them; thirdly, to impede our preparations; and, fourthly, to make similar preparations.

Hence the necessity of a series of dispositions (of security-dispositions, if you will), the object of which will be, *first*, to reconnoitre the enemy; *secondly*, to immobilise him; and, *thirdly*, to paralyse him and absorb his activity.

Such dispositions are included in what is termed the first frontal attack, which is rather the *preparation* of *battle* than battle itself.

But *reconnoitring* that enemy, wherever he shows himself, requires large forces; *immobilising* him requires large forces: you cannot stop him with nothing; and *paralysing* him, *holding* him, requires, again, both large forces and time.

Finally, the frontal attack, to which one may have intended devoting but small numbers (so as to keep faithful to theory), in practice will absorb the *largest part of our forces*, as well as it will take up *the largest part* of the *time*, at our disposal; while our decisive attack only uses the smaller part of our troops and lasts but for a few moments; hence a second optical delusion, which has confirmed (in superficial minds) the belief that the frontal attack was the true battle; for their judgment was based on *quantities* (forces and time), not on *results*—an error which thus brought them back to the doctrine of parallel battle.

Let us beware of such superficialities. Even should theory fail when applied by unskilful hands, should the essentials of theory be absorbed by accessories or its foundation be obscured by detail, history and reason have shown us that there is in battle only one valid argument: the decisive attack. This alone is capable

of ensuring the result desired, for it overthrows the enemy.

All acts of battle should tend to :

(1) *Preparing* that conclusion; be they called the action of an advance guard, frontal attack, artillery duel, encounter of cavalry, they cannot be studied and conducted alone, but only in so far as they prepare the conclusion;

(2) *Carrying out* that conclusion, and,

(3) *Utilising* it by pursuit, so as to destroy the fallen enemy.

Therefore, and from the outset, it is necessary to *make a plan* involving such a *succession of efforts* and a *corresponding distribution of forces.*

CHAPTER XI

BATTLE: AN HISTORICAL INSTANCE

Now that we have seen how theory leads to the conclusion: "Battle is a decisive attack; conduct of battle solely and exclusively tends to preparing and successfully carrying out the decisive attack," let us examine history to discover how this conduct of battle, aiming at a decisive attack, may be put into practice.

We will take for the moment an example of limited dimensions, the battle of Saalfeld. We shall find there all the acts of battle on a small scale. We shall see, together with the certain goal of action by force (overthrowing the enemy so as to *beat* him), all the acts which our theory regards as characteristic of the battle of manœuvre.

It is October 9th, 1806. The Grand Army, in three columns, is completing its crossing of the Franken-Wald in order to enter Saxony. The advance guard of the army (First Army Corps and three cavalry divisions under Murat) precedes the central column. It has beaten, at Saalburg and Schleiz, the Tauenzien division coming from Hof and aiming at Jena.

In the right-hand column, the head corps (Fourth) has reached Plauen; the Sixth, which is following, is at Hof.

In the left-hand column, the Fifth Corps (Lannes), which forms the head, is coming from Coburg. On the 9th of October, after a long and difficult march, it has reached Gräffenthal with the Suchet division and its cavalry; its 2nd division is four miles to the rear; the Seventh Corps (Augereau) has reached Coburg. (See Map J.)

Napoleon knows the main enemy army to be under Brunswick, between Gotha and Erfurt; advance guard at Eisenach: the Hohenlohe army to be at Jena, advance guard at Saalfeld. Napoleon believes the intention c

Echelle 1: 320.000

NANCY LITH BERGER LEVRAULT

the enemy generals to be a march on Würtzburg—the first army via Gotha and Meiningen, the other via Saalfeld and Coburg.

While continuing to bring his lengthy column out of the mountains in order to assemble it, to act afterwards with all his forces, to take the initiative of attack as soon as possible, Napoleon has to foresee the possibility of his enemy's forestalling him and attacking with superior forces the left column of the Grand Army. Hence the line of conduct he fixes for Marshal Lannes. He orders him :

(1) To call up the Seventh Corps and to attack, if the enemy has not more than 15,000 or 18,000 men;

(2) In the contrary case, that is, if the enemy, after concentrating superior forces at Saalfeld, himself attacks, to hold on so as to give the Emperor the time to arrive with 20,000 or 25,000 men; and

(3) In case the enemy by a rapid advance should not allow such help the time to intervene, to withdraw on Gräffenthal.

This policy is clearly seen in the letters between the Emperor and Marshal Lannes.

The Chief of Staff writes to Lannes :

"*Nordhalben, October 9th.*

"The Emperor will be to-night at Ebendorf, Davout at Lobenstein, Murat at Schleitz.

"It is assumed that the enemy intends defending Saalfeld; if he is there with superior forces, you must not do anything until you are joined by Marshal Augereau. *News of the enemy will be received during the day;* if he has *substantial forces* at Saalfeld, the Emperor will march with 20,000 or 25,000 men *during the night* so as to arrive to-morrow, at about noon, on Saalfeld via Saalberg.

"If such is the situation of things, Monsieur le Maréchal, namely, if the enemy assembles all his forces at Saalfeld, we have only one thing to do, which is to take up a position at Gräffenthal.

"The enemy cannot venture to march against you, with such considerable forces on his left flank; still, if he should do so with very superior forces, there is no doubt that you ought to retreat; because he would then

be caught and attacked in flank by the corps in the centre.

" But if the enemy has only 15,000 or 18,000 men, you must attack him after carefully studying his position; it being understood that Marshal Augereau's corps will by that time be with you. What is most important under such circumstances, Monsieur le Maréchal, is that you should send the Emperor news of your situation and of the enemy's, three times a day.

" If the enemy withdraws before you, you must arrive at Saalfeld as soon as possible and there take up a military position."

As we see, should the Fifth Corps strike, in the course of its march, upon an enemy provided with superior or very superior forces, it must escape destruction by means of a defensive or by a running fight.

The advanced corps or advance guards of 1806 are ready to use three kinds of tactics: To attack, to resist, to withdraw, that is, to manœuvre while retreating, according to what they may see or hear concerning the enemy with whom they are about to come in touch.

Marshal Lannes writes on the same day:

" *Gräffenthal, October 9th, 5 p.m.*

" I am arriving at this very moment with the Suchet division and the whole cavalry at Gräffenthal. It is now 5 p.m. The Gazan division will bivouac between the posts at Judenbach and Gräffenthal village. *To-morrow, one hour after dawn, the whole army corps will be placed two hours from here* on the road to Saalfeld, waiting for your Majesty's orders, which I hope to receive in the course of the day or of the night. . . . It has been a horrible day for troops and artillery, with frightful roads, no resources. . . . It is impossible for Augereau to be here to-morrow, there being twelve endless leagues from Coburg to Gräffenthal. . . ."

As a matter of fact, the situation in the evening of the 9th was the following: In the Fifth Corps, cavalry at Gesseldorf; both divisions bivouacking at the places mentioned above: In the Seventh Corps, advance guard ahead of Coburg: 1st division at Coburg: and the 2nd division south of Coburg.

Early on the morning of the 10th the following letter was written to Lannes by the Emperor's order :

" *Edendorf, October* 10*th,* 6 *a.m.*

" The Emperor approves of the dispositions you have taken. Urge M. le Maréchal Augereau to come on, and do you yourself immediately attack Saalfeld. The Grand Duke of Berg and Marshal Bernadotte are occupying Schleitz."

He also writes to Marshal Soult :

" *Edendorf, October* 10*th,* 5 *a.m.*

" . . . Marshal Lannes will only arrive to-day at Saalfeld, unless the enemy be there with considerable forces.[1] Thus the days of the 10th and 11th will be lost. If my junction is effected . . ."

When this order of the Emperor reached the Fifth Corps, that corps had already been on the march for several hours; it had only received Marshal Lannes's order up to that time.

From Gräffenthal to Saalfeld, the distance is twelve miles; it is ten miles from Gräffenthal to the far side of the woods. Having started at 5 a.m. and doing four kilometres (2½ miles) an hour, the army corps might be expected to reach the end of the woods, with the head of its column, at 9.

The road follows deep gorges, in mountains which are of a moderate height, but their slopes steep and covered with forests, and in most places impenetrable. The main watershed between the Mein and the Elbe was passed. The troops were now marching in the main down-hill.

How was this column formed? It consists in : *the advance guard : a light cavalry brigade* (Treillard); 9th and 10th Hussars, 21st Chasseurs, of three squadrons each; *one section of horse artillery* (2 guns of 4); 1 "*élite*" *battalion* (8 companies of the 4 last regiments of the

[1] This is obscure, but it is an exact rendering of Napoleon's hurried phrase. What the Emperor seems to have had in mind was : " Lannes will get to Saalfeld unless it is strongly occupied; but he could not get there before to-day."—Translator.

division), the 17*th Light Infantry* (2 battalions and 2 "élite" companies) under Claparède.

The main body of the column: 34th regiment (3 battalions), 40th, 64th, 88th, of 2 battalions each; divisional artillery (2 guns of 12, 6 of 8, 2 howitzers).

There is no *interval* between the advance guard and the main body; such an interval would have been useless in view of the range of arms. Once the advance guard should have closed up on its head, and the main body also closed up on its head, the commanding officer would have at his disposal a manœuvre-zone of 1500 or 1800 yards in which either to withdraw his forces or send them into action under shelter from enemy guns.

The troops set out at a brisk pace, on a fine autumn morning, before dawn (5 a.m.), the air being fresh and biting.

The men were rather heavily loaded with three days' food in their haversacks; they carried only three days' supply because they had already consumed five days' supply out of the eight with which they had started: at Würtzburg (four days' biscuits); at Schweinfurt (four days' bread).

They marched well, in spite of that. We have here the Grand Army in full possession of its powers. Songs are heard all along the column; new songs written for the new war.

At the first halt, the Emperor's proclamations are read to the troops: the proclamation to the army, and that to the peoples of Saxony, through which the army is about to march. They are greeted by thousands of cheers: "Vive l'Empereur!" which wake the remotest echo in those silent passes. Then the march is resumed at the same brisk pace.

At the head of the troops rode Marshal Lannes, the most brilliant commander of an advance guard ever known, the victor of Montebello, in whom we shall soon find cause to admire calm, measure, caution, as well as decision and energy. He is just thirty-seven years old. It was about him that Napoleon, who was a good judge of men, wrote:

"He was wise, cautious, bold in the presence of the enemy, imperturbably self-possessed. He had had

little education. Nature had done everything for him. Napoleon, who had seen the progress of his intellect, often expressed his wonder at it. He was better than all the generals of the French army on the battle-field in manœuvring 25,000 infantry. . . ."

His Chief of Staff represents the elder element in the column : this is General Victor, forty years old. Then come : Divisional Commander Suchet, thirty-four years old; Brigadier Claparède, thirty-two; and Brigadier Reille, thirty-one.

Between 6 and 7, a man listening with care might have heard a few musket shots in the far distance.

For light cavalry patrols were circulating ahead of the column, searching in all directions, making reconnaissances everywhere. Those patrols were provided and supported by cavalry parties (one squadron, half a squadron); these latter followed the side roads which lead from the state road to Ausgereuth into the Saale valley : the Eiba road, and the high road to Wittzensdorff, Wittmansgereuth, Beulwitz.

All this reconnoitring cavalry started very early. It had already been sent a substantial distance ahead on the preceding day.

While trying to get out of the wood in order to see more clearly, it met and routed certain enemy patrols on the road to Ausgereuth; those patrols withdrew on Garnsdorf.

The roads going right and left through the woods, and the woods themselves, were clear; but a few enemy squadrons had been seen above Saalfeld. A long column had been seen northward, marching from Schwarza on Saalfeld.

The cavalry brigade made at a trot for the issue of the wood, followed by the "élite" battalion which hurried forward. The rest of the column continued marching carelessly and gaily.

The Marshal arrived at the issue of the woods.

A few mixed enemy outposts had been established near the road and on the hills commanding Saalfeld. They are reconnoitred, then attacked with infantry (first action at about 9); they are driven back. The advance guard arrives in front of Saalfeld; it is nearly 10 a.m.

Once out of the woods, the view grew clearer; then it suddenly becomes quite clear. Marshal Lannes, at the head of his infantry, halts on the hill commanding Garnsdorf. This is what he sees:

At a distance of two miles, the Saale; on the river, Saalfeld, a big town of a circumference of two miles, 300 feet below the level of the woods; Garnsdorf halfway down the slope; more to the north, a small valley, that of the Siegenbach; then another, that of the Beulwitz brook; Beulwitz, Crösten, Wolsdorf. Further to the north, the ground rises and forms a spur which commands the bend of the Schwarza and its confluence with the Saale; highest point: the Sandberg. The country is absolutely without cover.

This observation is completed by that of the enemy army. At the foot of the slopes, on three regularly and correctly drawn lines, there appears a force which an expert observer might rate at 6000 or 7000 men. It is the division of Prince Louis of Saxony.

Saalfeld is occupied by the enemy.

A few squadrons are seen manœuvring up-river above the town in the direction of the gap of the Saale.

What had happened on the enemy side?

Since October 7th, the division of Prince Louis—the advance guard of Hohenlohe's army, including 18 squadrons, 12 battalions, 27 guns—was cantoned north of Rudolstadt. Its outposts went down from Oberhof to Kahlerten, and had their reserves at Appurg (5 squadrons), and at Blankenberg (3 battalions, ½ battery, 3 squadrons).

On the 9th, Prince Louis, after hearing that Lannes's corps had arrived at Gräffenthal, concentrates his division at Rudolstadt, and orders Saalfeld to be occupied by the reserve at Blankenberg (less one battalion) reinforced by one heavy battery (in all 12 guns). There are, therefore, at Saalfeld, since the night of the 9th: 2 Prussian battalions; ½ light battery; 1 heavy battery; 1 company light infantry; and 3 squadrons of hussars.

On the same day, the 9th, Prince Louis received from Prince Hohenlohe the order to come to Pössnech via Saalfeld, as soon as the posts of Blankenburg and Rudolstadt should have been relieved by detachments from Blücher. Yielding to a different idea of his own (highly debateable, by the way), he decides to forestall

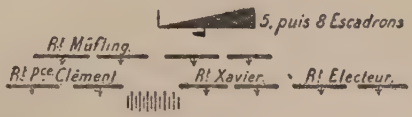
the attack and to give battle in order to save Saalfeld, where there was a depot of stores.

In the morning of the 10th, having heard early of the march of the French corps on Saalfeld, he sets his division moving via Schwarza on Saalfeld.

He arrives at about 9 at a point in a line with Wolsdorf, while the small advance-guard action above mentioned is taking up its position. He forms his division in three lines, on a low ridge placed to the left rear of Crösten, and in front and to the right of Graba.

Such is the sight Marshal Lannes sees when he reaches the plateau.

The Prussian division has its back to the Saale; in case of a check, it can only retire over the bridge of Saalfeld or over that of Schwarza. It is easy to measure its forces. It cannot be reinforced for a long time. Lannes will therefore attack, thus keeping to the spirit of the instructions he has received.



What does Prince Louis intend to do on his side?

Led by a very Prussian instinct, he has left to the French the uncomfortable and difficult slopes which rise towards the woods, and has made for the plain and kept to the bottom of the valley, where regular manœuvres are easier. It is, indeed, a matter of principle with the Prussian army that it is necessary to attack and to start Rosbach all over again; that attack must take place when the enemy debouches from difficult ground, out of a pass, for instance; to attack in echelons is with them the last word of science. In order to achieve that manœuvre, what you need before all else is an open ground for manœuvre. The Prussians at that time did not know how to fight in any other fashion. *Caput mortuum*, as Frederick would have said.

Moreover, as a result of the eighteenth-century views prevailing within the Prussian army, they do not doubt that the French will take Saalfeld as an objective. Saalfeld is a storehouse, a road junction, a crossing over the Saale, a complete geographical objective.

Unfortunately for Prince Louis, generals trained by the French Revolution ignore that whole science of geographical points, which is foreign to war, which is the very negation of struggle, which is a symptom of decay, which, in any case, is "ce fin du fin qui est la fin des fins."[1] They know one thing only, they desire but one thing, a thing which is undeniably the true goal: *the defeat of the enemy.*

The Prussian army not only lacks sound views; it also lacks food. To mention but one point, they found it extremely difficult, in this pasture country, and in October to feed the horses of one small division!

There is irony here. An order arrives during the battle to the effect "that the forage rations must be equalised with the greatest care," such rations not being in existence at all. Formalism was expected to save everything.

Though this striking observation of the division on the bank of the Saale has singularly and undeniably simplified the difficulties of preliminary reconnaissances, all dispositions are nevertheless taken, on the French side, so as to be able to conquer such difficulties as may arise: scouting has been undertaken ahead, to the right, and to the left; insufficiently strong patrols are supported by the cavalry brigade; the latter has been reinforced by an "élite" battalion. It further disposes of certain artillery with a view to "*taking soundings*" of the ground as well as for *resistance.*

The opportunity has come for tearing through the screen formed by the enemy outposts at the issue of woods; the advance guard has immediately intervened, and, owing to its composition, it has succeeded in getting a clear view of things, at least towards Saalfeld and Crösten.

Light cavalry parties have also occupied Beulwitz as well as the eastern corner of the forest, on the right above the gap of the Saale. They scout from that point in all directions in order to confirm such reports as have already been received concerning the enemy.

In the presence of this situation, once the Marshal has decided to attack, how will the action develop against an enemy so neatly drawn up at the foot of the hills?

[1] Literally: "That finesse which is the end of everything," a quotation from Rostand's *Cyrano.*—Note of the translator.

Before organising the attack, its direction must first of all be fixed. Shall he attack *by the right?* There is no manœuvring space in that direction; moreover, Saalfeld, a strong "point d'appui," closely bordered by the Saale, would have in that case to be carried as a first step.

Shall he attack *in front?* This would amount to taking the bull by the horns, to making it possible for the enemy to use the advantages of his line by means of fire and march. It would mean attacking him in his strongest part.

By the left? There defiladed ways of access are available as well as an easy manœuvring ground, that is, a wide ground without obstacles and well provided with cover.

In that direction, the attack may be *prepared* without the enemy *being aware of it;* it may be *launched* without being stopped by important obstacles; it may develop the *whole extent* which the forces available allow.

The attack will therefore be launched on that side, in the space extending between Aue, the Sandberg and Wolsdorf, which ground is easy to advance over, though hilly.

It is now 10 a.m. The French column is arriving, but its march grows slower, owing to the heat of the day and the congestion of the roads; three or four hours pass before all the forces can be assembled on the reconnoitred ground.

But during such a long lapse of time, the enemy may attack the debouching column; he must be prevented from doing so; that is the task of the advance guard.

To stand on guard by getting hold of everything that helps one to check the enemy's advance, such is the first act in the preparation for battle. Hence the occupation of ridges from which to fire; hence the occupation and defensive organisation of villages, so as to increase the resisting power of a force the numbers of which are reduced to a minimum.

The *assembled* enemy may also *change place*, undertake a manœuvre, in short, alter the dispositions against which our attack is being organised. How can he be prevented from doing so? By attacking him, but without risking anything; with weak numbers but on a wide front, so as to spare the forces. Hence an offensive made by

small units starting from villages which shall remain occupied. Thus we shall see in this battle swarms of skirmishers advancing through gardens, orchards, hollow roads, in order to threaten the enemy and to extend the action far ahead from the outskirts of the villages.

After having been first used as *centres of resistance*, those villages next become *starting-points* for a number of offensive actions.

To sum up, a number of occupied villages marking the ground with strong points, and connected with each other by means of lines of skirmishers, who, being on the ridges, can see and act while under cover and provide elements for a partial offensive: such is the first line.

There must be in the rear a reserve of mobile troops kept for an emergency. This will be, in our present case, composed of cavalry. After the first needs are provided, that reserve will consist of infantry. The *reconnoitring* task of the advance guard must, by the way, be understood in the same offensive sense.

In the present case such a reconnaissance is absolutely useless, as the enemy dispositions and numbers are very clearly seen in the plain. But in the presence of a concealed and sheltered enemy, it would have been necessary to reconnoitre, that is, to determine the distribution and importance of his forces, so as to be able to set up a rational manœuvre.

How would such a reconnaissance have been carried out? Obviously by means of an offensive.

Such an offensive, if it were not to risk anything, would have started from resisting points which should have been kept occupied. It would then have developed by successive movements against the enemy front. It would in any case have been made to bear only on that part of that front which might be of interest for our attack, that is, on that part where we later *intended to strike* our main blow, or wherefrom we could be *struck* ourselves.

The enemy is, then, reconnoitred and fixed on the whole of the front which is of interest to the action undertaken. This is the way in which must be understood Napoleon's maxim: "One must go into action everywhere." In compliance with this view, a division which has been ordered to attack will not reconnoitre

a front of four or five miles which is of no interest to the attacking force. Similarly, as soon as a reconnaissance has supplied sufficient information concerning the part of the line to be attacked, that reconnaissance must come to an end.

Having thought out these things, Marshal Lannes orders the following disposition to be taken. (See Sketch K):

(1) *The "élite" battalion* will continue to drive back on Saalfeld the Prussian posts holding the hill, and will stop at Garnsdorf, which it will occupy in strength. *Cavalry* will place themselves in reserve in the bottom of the Siegenbach valley, then the *17th Light Infantry* must order its *two "élite" companies* to occupy the north-eastern corner of the wood facing the gap of the Saale, which they will have to defend. *It will occupy*, with the remainder of its forces, Beulwitz, which it will reach by marching along the woods. *The artillery section* will fight at Garnsdorf. General Victor will command at Garnsdorf and south of it. General Claparède will command at Beulwitz.

(2) The remainder of the division will march through the wood or along the outskirts of the wood, making for Beulwitz (the remainder of the division consists of four regiments and artillery).

(3) The "points d'appui" of Garnsdorf and Beulwitz must be connected by skirmishers. Cavalry are to establish themselves behind those skirmishers.

Later, after the troops shall have arrived in sufficient numbers, this front—which is still weak—will be consolidated by a reserve; it will be formed of the two last battalions arriving on the ground.

As is seen from the above, the operation tends from the outset to directing on Beulwitz the main effort of the *division*.

In consequence of these decisions, enemy reconnaissances soon report French troops to be coming on in three columns, which greatly surprises the Prussians, who are attached to the single-column system.

At about 11, the French had established two companies at the southern corner of the wood; one battalion and two guns at Garnsdorf; and two battalions at Beulwitz.

From the corner of the wood to Beulwitz the distance is 3500 yards; Lannes is not afraid, as we have seen, to spread, for the purposes of an advance guard, over so considerable a front, three battalions and a half and the cavalry brigade; and this with muskets the efficient range of which was not superior to 150 or 200 yards. Such are the dispositions, such the dispersion, to which some people object even nowadays, with quick-firing rifles which really and powerfully sweep the ground over a range of 1200 to 1500 yards. They object to such dispositions by quoting the regulations which prescribe that the front of a battalion in action must never be more than 300 yards. Those regulations were never meant to contradict what we see Marshal Lannes doing here. For the object, here, is not to beat the enemy, therefore no "front of action" is in question. Troops are so far only taking possession of the ground, which they do by putting a certain number of watchmen at all the entrances—watchmen who should be able to shut the doors if a thief comes, and also, after having strongly established themselves, to go and draw the neighbourhood to see what has become of the thief, and, if need be, to chase him.

We shall soon have the combat, the attack proper; *then* we shall see the fronts comply with these rules; *then* we shall find the average front of a battalion to be far less than 300 yards.

Such a situation, once secured on the French side, will continue for some time without much change. Meanwhile the whole first part of the programme is carried out, that is, *preparation.*

The Simonet artillery section, making use of a favourable position, continues to fire against a much superior battery (12 guns, 1 heavy battery, ½ light one), and against the troops at Saalfeld, that is, two battalions, which are holding in the open the approaches to that town. The section is being supported in its action by a line of skirmishers established on the ridge, and by the occupation of Garnsdorf. Soon it even succeeds in advancing.

At Beulwitz, the 17th has occupied the village and sent out skirmishers who, utilising gardens and orchards, have arrived near Crösten. Some scouting is also

Combat de SAALFELD
10 Oct. 1806.
1er Moment. 11h
Ob. Prylipp
Ut.
n. Rötzlstadt
Schwarza
Blankenburg
Schwarza
Culm
Römschütz
Ut. Wirbach
Sandberg
Wölsdorf
Denk
Saale
Aue am Berg
Crösten
Ob. Hain
17e L.
Graba
n. Pössneck
Paulwitz
Alten-Saalfeld
34e
Siegenbach
Saalfeld
Lerchenh.
B.E.
Garnsdorf
VII.e L.
1 : 50000.
0 500 1000 2000 3000 4000 m
Arnsgereuth

carried out for the regiment towards the north by cavalry patrols.

At Beulwitz as at Garnsdorf, the skirmishers who have crept ahead keep up against the enemy, lying unsheltered in the plain, a very deadly target-fire. This is in every respect a complete fire action.

Owing to the favourable circumstances, which make preparation easier as a result of the dispositions taken, the programme develops gradually, and the greater part of French troops are found, by 1 p.m., to have arrived as ordered.

As for the enemy, what impression did he derive from all these actions? We have his own evidence on this.

All our information concerning him is borrowed from the work of an eye-witness, the Saxon engineer Mümpfling, author of the *Vertraute Briefe*.

After describing with little praise the situation in which the Prussian army was drawn up, he adds :

" Can you not see us all in line before that threatening rampart and lying unsheltered on the narrow stretch of meadows which separates it from the Saale, with our backs to that river? From that rampart, enemy skirmishers, themselves under perfect cover, could easily pick out any one of us, without its being possible to return the fire on completely invisible men; and this pastime lasted for *several hours*. During that time, the French commanders, who, from their places, could thoroughly mark the weak points in our line, took their dispositions accordingly. . . .

" The manœuvres of the French were developing more and more, their object was to *fend off* the troops posted on the left wing above and near Saalfeld, and to keep the whole front of the Prince's position busy with their skirmishers, *always edging for the left*, so as to envelop the Prince and cut him off from the Schwarza."

This, of course, was written after the event; and the writer has understood what the preparation aimed at. During the action itself, however, the intentions of the French were not so easy to discover. Save the fire of those " invisible " skirmishers, whose shots could not be returned, nothing was to be seen on the horizon. Reconnoitring parties sent out very early in the day saw columns marching on Eiba, on the main road, on Beulwitz. These columns, however, had all

disappeared, and nothing but an insignificant attack was taking place. What, then, are the intentions and movements of these numerous columns of which nothing is seen? The Prussians do not understand, they grow uneasy; what should they expect? In case of a check, are they sure of being able to cross the Saale or the Schwarza? Obviously not. One battalion (2nd Müfling) is sent to Schwarza.

At the same time an order arrives from Prince Hohenlohe to remain at Rudolstadt and not to attack, as the army is coming from Blankenhayn to the Saale. A retreat by Schwarza, in case of a check, becomes more and more important. The Prince orders the foot battery and the 1st Müfling battalion to occupy the Sandberg. (See Sketch L.)

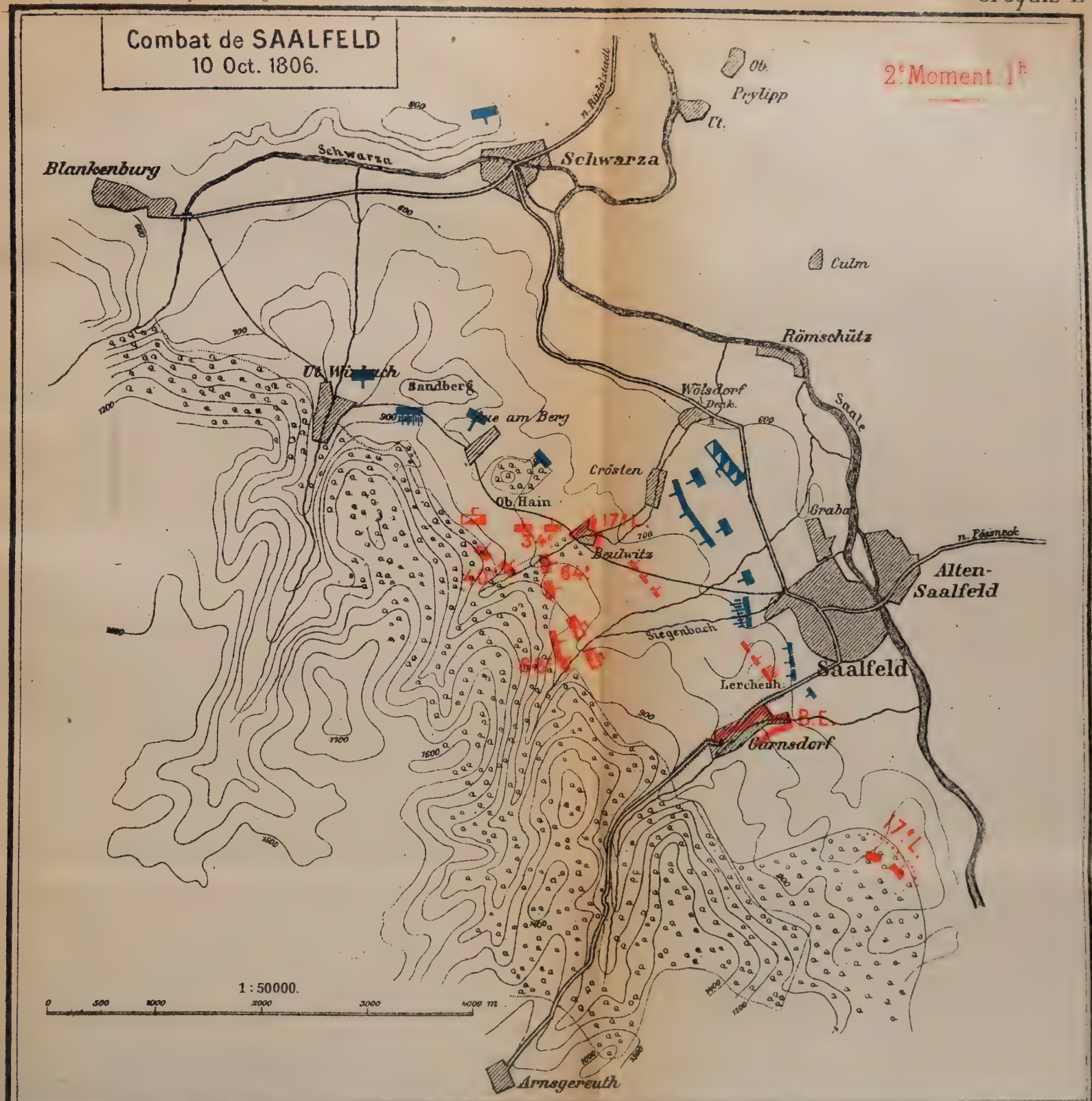
The Prince-Clement regiment is ordered to establish one battalion (the 1st) between Aue and Crösten, in order to connect this occupation of the Sandberg with the main body of the division. The 2nd Clement battalion is to climb up on to the Sandberg, where it is to place itself to the right of the battery and of the 1st Müfling.

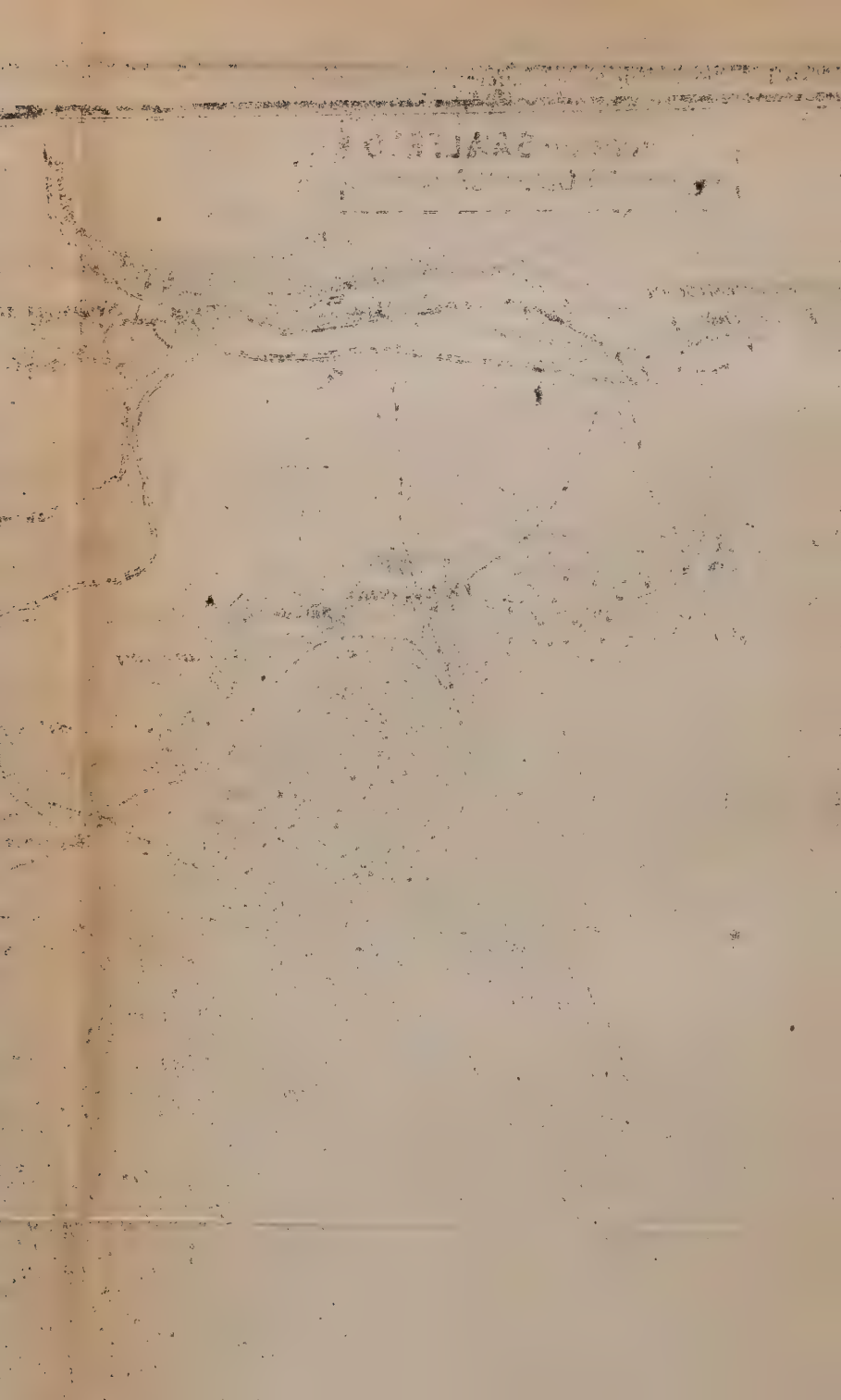
Such is the dispersion one always falls into through tactics in which considerations of ground are allowed to prevail over everything else.

Instead of attempting to carry out a military plan, and using to that effect such physical means as are provided by the ground, it is the ground which here dictates the conduct of operations. In consequence, certain points are first of all occupied by reason of their intrinsic value—without measuring their importance in relation to an operation which is not fully willed; later on, gaps in the occupied ground are filled; at last one is led to impotence, because one's forces will be most scattered at the very moment when it is decided to act.

Here two regiments and fifteen guns are devoted to occupying Schwarza and hills commanding that place; two battalions and twelve guns to occupying Saalfeld.

It is about 1 p.m. After making all those concessions to the value of positions, Prince Louis, an enterprising, bold man of action, who is growing anxious as a result of the complete uncertainty in which he finds himself in, decides to attack; he attacks straight in front of him


Combat de SAALFELD
10 Oct. 1806.
2e Moment. 1h
Ob. Prylipp
Ct.
n. Rützlstadt
Schwarza
Blankenburg
Schwarza
Culm
Römschütz
Ut. Wünsch
Sandberg
Wölsdorf
Denk.
Saale
Crösten
Ob. Hain
Graba
n. Pösneck
Baulwitz
Alten-Saalfeld
Siegenbach
Saalfeld
Lercheuh.
B.E.
Garnsdorf
17e L.
1 : 50000.
0 500 1000 2000 3000 4000 m
Arnsgereuth



with all the forces available : six battalions out of twelve (without artillery, without any kind of preparation); four are in the first line, two in the second. As soon as that attack, going up east of the line Crösten-Beulwitz, shows itself, its right is immediately fired upon by the numerous swarms of French skirmishers filling the gardens, orchards, and hollow roads near the villages, still invisible and pouring a hail of bullets on the right of the attack. We get a fight between the lion and the gnats. The line wavers, stops, answers by volley fire—without result, by the way—when, at the same moment, it is attacked in flank by two battalions of the 34th, which, after marching under the cover of the slopes, appear and charge in column with drums beating, General Suchet at their head.

The ordeal is too severe. The Xavier regiment completely falls back, the left of the line withdraws in the same way (regiment of the Elector). The French 17th follows on their heels into Crösten; but being assaulted itself by the reformed Prussians, mainly by the regiment of the Elector, which has not suffered and now attacks in flank, the 17th, having no cartridges left, loses Crösten and retires on Beulwitz, where it is relieved by the 64th, and goes over to the reserve.

Marshal Lannes finds at this moment that the situation is maturing.

It is about 2 p.m.; (1) all his troops are present; (2) the enemy has been well reconnoitred; (3) he has been immobilised; and (4) his forces are dispersed in order and already shaken.

The Marshal will attack in the direction previously decided upon : by the region of Beulwitz and Crösten. He will strike the enemy mass in the plain with the main forces of the division; the Claparède brigade (17th, 64th) attacking in front, the Reille brigade (34th, 40th) attacking in flank.

But he must previously protect himself against the troops holding the Sandberg and Aue, and give to the attacking division the space required for deployment. (See Sketch M.)

The Reille brigade is entrusted with that twofold task. To this end, it marches in the direction of the Sandberg and advances towards the Aue wood under the protection of numerous skirmishers, the 34th being

in the first line: in echelon to the left rear, the 40th; and in echelon to the right rear, the 21st Light Infantry. (The flanks of the attack are protected, how? By echelons capable of counter-attacking any troops that might threaten those flanks.)

The brigade first strikes the Clement regiment, then the battery of the Sandberg, fifteen guns, which it captures; *it ensures the position of those points:* Aue, Sandberg; *it carries out the pursuit* with part of its forces, and resumes, with what remains available, that wing attack which it has the mission to perform. The 34th will carry out that attack, the 40th having been almost wholly absorbed by the struggle against the battery and the occupation of the conquered point.

The moment has come to determine the whole affair. It is nearly 3 p.m. The manœuvre, in view of which all these efforts have been made since the morning, will at last be carried out. (See Sketch N.)

Artillery has arrived in the meantime; it takes up a position near Beulwitz, then advances, and, by firing a few rounds of case, prepares the infantry attack.

Marshal Lannes orders the charge to be beaten and sounded on the whole line: then, on that enemy already shaken by fire, are seen to arrive "masses of infantry which, coming down at full speed from the heights, fall on the Prussian battalions like wild torrents and rout them in one instant" (Marbot).

Engineer Mümpfling describes this very well too:

"At about 3," he writes, "the French columns fell upon us like an avalanche. In the twinkling of an eye, we found ourselves cut up into three bodies, surrounded by a circle of fire and forced back on the river."

Such is the Prussian impression; such are the results. But what had happened on the French side?

Well, at the general signal of attack given by the Marshal, all the troops near Beulwitz pushed forward. Thus was launched: (1) a *frontal attack*, including, to the right, 9th and 10th Hussars, in the centre, 54th Infantry, to the left, 21st Light Infantry; having in the *second line* the 87th Infantry and 17th Light Infantry; (2) *a flank attack*, 34th Infantry (three battalions).

We have, then, the *whole* cavalry, the *whole* artillery (less two guns) and *four infantry regiments* (out of five) attacking at once an enemy already shaken by fire, so

Combat de SAALFELD
10 Oct. 1806.
3e Moment 1h½
Ob.
Prylipp
Ut.
n. Rödelsdorf
Schwarza
Blankenburg
Schwarza
Culm
Römschütz
Ut. Wirbach
Sandberg
Wölsdorf
Deuk.
Saale
Aue am Berg
Crösten
Ob. Hain
Graba
40e
21e
Baulwitz
17e L.
n. Pösneck
Alten-
Saalfeld
Siegenbach
Saalfeld
Lerchenh.
Garnsdorf
17e L.
1 : 50000.
0 500 1000 2000 3000 4000 m
Arnsgereuth

Combat de SAALFELD
10 Oct. 1806.
4e Moment. 2h½.
Blankenburg
Schwarza
Schwarza
Culm
Römschütz
Mt. Wirbath
Baudberg
Wolsdorf
Ob. Hain
Graba
Alten-
Saalfeld
Saalfeld
Lerchenh.
Gamsdorf
B.E.
Stegenbach
Arnsgereuth
1 : 50000.

as to finish him off; attacking *by surprise*, that is, with an *undeniable* superiority of means, *suddenly*, and from *a short distance*, that very point of the enemy line which had been selected as the easiest to approach and had been specially prepared as a point of attack: the front of the attack is 1500 or 1800 yards wide for all the acting troops; this is less than the 300 yards of front to a battalion prescribed by the regulations.

It is mainly the French left which strikes—the more advanced wing. To the right, we find cavalry supported by infantry (88th); they came down in one mass to the plain.

That cavalry soon found a favourable opportunity for charging the Prussian infantry, which was being hard pressed on all sides by the French infantry and fired on by artillery. The cavalry charged and sabred through a mass of men for half an hour. Prince Louis of Prussia, seeing his infantry beaten, hurried up to his squadrons near Wolsdorf and came on, but in vain, at their head. He fell upon the French 10th Hussars, and came himself upon Sergeant Guindet, who, being close against him, called out to him to surrender; the Prince answered by a sword thrust, and fell himself immediately, pierced by a thrust.

The defeat was complete.

There remained nothing but fugitives flying as best they could towards Blankenberg, Schwarza, or across the Saale.

At the moment when the general attack started, Victor had assembled at Garnsdorf his "élite" battalion, both companies of the 17th, and marched on Saalfeld, which he carried; he continued the pursuit of the enemy as far as Rudolstadt by the right bank of the Saale.

Pursuit was also continued in the direction of the Schwarza. Claparède there led a whole brigade (17th, 34th), which drove the enemy back beyond Blankenberg and crossed the Schwarza with the water up to their waists. Three captains of the 17th fell there, mortally wounded.

Fifteen hundred prisoners, four flags, twenty-five guns, two howitzers, six wagons, such were the trophies of the day.

No one has related with precision the losses in dead

of the Prussians; writing, however, that very evening to the Emperor in order to report the battle Marshal Lannes, who was not much of a sentimentalist, writes: "*The battle-field horrifies one.*"

The Suchet division, which alone had come into action, had 172 casualties, ten horses killed. The Simonet artillery section of four had fired 264 rounds. The divisional artillery had not used up quite so much ammunition—about 236 rounds. The infantry had fired about 200,000 cartridges, which makes the rather considerable average of 20 per man.

What a methodical spirit there is in this action conducted by the young Marshal! One wonders which deserves to be most admired in him, the *enlightened wisdom* with which he patiently prepared the battle for six hours, or the *fitness* and *dash* with which he launched his final attack. So true is it that the art of fighting does not consist, even with the most eager and energetic of chiefs, even when the best of troops are available, in falling on the enemy no matter how.

The theory which has been put in practice is here obvious: one clearly sees how the manœuvre of long duration (from 9 a.m. to 3 p.m.) aims exclusively at bringing about the powerful, undisputable conclusion by means of all the main forces; such a conclusion being preceded by a preparation to which the *smallest numbers possible* were devoted.

That preparation includes the combat of the advance guard, the object of which was reconnoitring, fixing, if need be stopping the enemy; this combat is followed by a frontal attack which completes the enemy's immobilisation and wears him; it ends in a decisive attack, a surprise in time and space, effected by means of number, speed, choice of starting-point, and of a peculiar violence which changes the attack into an avalanche.

When we try to apply our theory to modern circumstances, changes must of course be made, so as to take into account the influence of modern arms upon battle; but the picture remains the same in the main.

The battle of Saalfeld, had it to be fought to-day, would not be conducted in another fashion.

The advance guard would seize Garnsdorf and

Beulwitz and protect itself towards Saale. It would be reinforced by part, or the whole, of the artillery, according to needs; and it would act offensively or defensively against the enemy according to circumstances; (1) according as the enemy may be sheltered, concealed or reconnoitred; (2) according to whether he attacks or merely resists; (3) according as he may manœuvre or keep still; and (4) according as he may send his forces into action or spare them.

Under the protection of this combat in *advance guard*, then of the *frontal attack*, of the preparation, the *main body* of forces arrives to the point where one intends to produce the main effort.

That point would obviously be determined by the same considerations. The direction selected for attack must include good means of access, few obstacles, and space so as to manœuvre in force.

Of the main body in reserve, two parts must be made : a *main* one, devoted to the *decisive attack* (17th, 34th, 64th) and to the security-dispositions that attack involves, the other *weaker* (88th) designed to keeping the front attack inviolate in any case : this is the reserve of the front.

In the process of execution, the decisive attack would tend to achieve such a combination—envelopment or attack in front and in flank—as would enable numerical superiority to develop all the effects of which it is capable : fire, march; the attack in front and the attack in flank remaining in any case closely connected with each other.

The attack would have to be still more carefully prepared by artillery. Finally, at the moment when the enemy, worn down and held on his front, threatened on his most exposed flank, should be on the point of being assaulted by the decisive attack, the general attack would have then to be let loose, to-day as in the past, in order to prevent the enemy from parrying the final effort.

Then comes the *pursuit*, without truce or mercy, with troops as *well in hand as possible*, *commanded*, here, by Victor and Claparède.

That theory of the decisive attack had been perfectly grasped by the Germans of 1813, from studying the wars of the Empire. Proof :

Instructions for officers commanding corps, brigades, etc., delivered by King Frederick William during the truce of 1813 :

" As it has come to my notice that, during actions and battles, the various arms have not been always conveniently brought into action, and that dispositions in view of battle are generally unsatisfactory, I desire, upon the occasion of the coming resumption of hostilities, to recall the following *rules of war :*

" These are the general principles :

" (1) In view of the manner in which our enemy is making war, it is generally unwise to begin a battle with cavalry, or to bring all the troops immediately into action. Owing to the way in which he uses his infantry, he succeeds in delaying and supporting the action; he carries villages and woods, hides behind houses, bushes, and ditches; he knows how to defend himself skilfully against our attacks by attacking himself; he inflicts on us losses with few troops, when we advance against him in great masses; he then relieves those troops, or sends fresh ones into action, and, if we have on our side no fresh troops to oppose to his, he compels us to give way. We must draw therefrom this principle, which is the enemy's, that we must *spare our forces and support the action until we turn to the main attack.*

" (2) Our artillery has not produced a great effect, because it had been too much divided. . . .

" (6) War in general, but, above all, the issue of battle, depends upon superiority of forces on one point.

" (7) In order to secure this superiority of forces, it is necessary to deceive the enemy concerning the real front of attack and to make a *false attack* and a *real attack.*

" (8) Both attacks must be masked by skirmishers, so that the enemy should be unable to distinguish the difference.

" (9) A line of skirmishers is first of all to be sent out. The attention of the enemy is to be drawn by several battalions designed to fire on one of the wings, on which guns must be firing heavily at the same moment. Battle must be ordered in that fashion.

" (10) Meanwhile, the real attack is still postponed, and it only begins later on, at the moment when the enemy's attention is entirely turned on the false attack.

"(11) That real *attack* is made as quickly and as vigorously as possible, and above all by a large mass of artillery and infantry, of a superior force, if possible, while a particular corps goes round the enemy flank. . . . In principle, a commander should devote one brigade to the false attack, two brigades to the real one, and have one brigade in reserve.

"These are principles which are well known to you, and which have been several times commended. We have put them frequently into practice in our peace manœuvres, but I remind you of them, because what is known is sometimes forgotten, because though a simple thing may seem to be a commonplace, yet victory often depends upon it. Unless one is careful to recall it every day to mind, one indulges in combinations which are too scientific, or, what is worse, one goes into battle without having taken any dispositions whatever."

As we see, after explaining the theory of the *preparatory combat*, or *false attack*, and of *decisive attack*, which he calls *the real attack*,[1] after showing by what kind of actions this theory must express itself, the King states, in order to make it more precise for the use of undecided minds : Out of four brigades, you shall devote one to the false attack, two to the real one, and one to the reserve. Later on, a perfected doctrine will lay down the formula : a third in order to *open*, a third in order to *wear down*, and a third in order to *finish*.

The specialisation of forces reappears in either formula. The German army have to-day crudely and simply adopted that idea, without fixing any limits to it, so that we see at their manœuvres decisive attacks to be carefully *prepared, brought up under shelter*, then launched from a distance of 800 or 1000 yards, and including three-fourths of the forces in action.

Who would venture, in the presence of such processes, to resort to parallel battle, be it the outcome of an accepted system or of a *wrong economy ?*

[1] Once that notion had penetrated the ranks of the German army, it was never overlooked by them. Seeing the formidable attack at Leipzig, Napoleon is said to have comforted himself by exclaiming : "At last, I have taught them something."

Let us, moreover, go back to August 18th, 1870. That very idea of a decisive attack to be prepared was the foundation of von Moltke's whole combination: while the First Army was to attack in front, the Second was to attack the right French wing in front and in flank.

Where was that right wing? No one knows. But, wherever it may be, it will be assaulted with an undeniable numerical superiority. Sufficient numbers have been attached for that purpose to the army of *manœuvre* and of *decision*, the Second; it has five army corps: Third, Ninth, Tenth, Twelfth and the Guard.

Finally, that right French wing was found to be much further away than had been supposed. It was believed to be at La Folie; it was, as a fact, at Saint-Privat.

The Second Army had to take over part of the frontal attack; it devoted to that attack one army corps, which was therefore missing in the decisive attack. Did Moltke's forecast go wrong for that? It was altered, but it did not cease to be right. Decision was secured on a more distant point; but he still had the means of securing it.

At the end, as we know (without mentioning the isolated and fruitless enterprise of the Guard, due to an ill-conceived initiative), we find the Guard and the Twelfth Corps, with the Tenth in second line, acting against Saint-Privat: three army corps against one single objective. The infantry of the two first army corps proved sufficient; that of the Tenth was ready to act, however, in case of need. In any case, the artillery of all three army corps took part in the attack; in all nearly 300 guns against a single common objective.

We have here an *undeniable superiority of means* utilised on a *reduced space*, within a *very short time*—a blow, therefore, which it is impossible to parry, producing under a new form the *surprise*, the *event* of the Napoleonic battle.

CHAPTER XII

MODERN BATTLE

Execution [1]

If from the battle of Saalfeld studied above we come to the act of force which is implied by modern armies, many data must be altered:

(1) Arms have a longer range; they are more deadly; which compels forces to take up their dispositions for attack at a greater distance and under better cover. Similarly, when in action, dispositions must tend, more than in the past, to utilising in its entirety the power of modern arms, which is henceforth indisputable.

(2) Armies are more than ever manœuvring forces; they cover themselves with greater care than ever. It is therefore more difficult to reconnoitre the dispositions of the enemy; reconnaissance must be carried on to a later stage; it has also become more difficult to immobilise the enemy.

(3) The numbers opposed to each other have reached unheard-of proportions.

In consequence, assembling troops in view of a decisive attack requires a long time. Such troops, once assembled, can generally be used only on the ground on which they find themselves, for time is lacking to bring them to some other place. Hence a necessity for deciding early in what direction the attack must be delivered, also of more completely reconnoitring the enemy dispositions and the ground.

The part played by *preparation* is becoming greater in every way: Inform better; Resist for a longer time; and Fix more efficiently.

Similarly, again, the conduct of attack, once the

[1] According to the studies of battle by Colonel Ardant du Picq, the lectures of General Cardot, the combat-instructions of General Millet and General Bonnal.

direction has been settled, will involve a more exacting kind of tactics, as it aims, besides exerting a moral action, at entirely utilising such perfected physical means, rifles and guns, as are at its disposal.

In any case, what has been said about the philosophy of battle and about the arguments it puts forward remains true in the main, as it is the same moral being, man, who is fighting; the forces in action are ruled by the same mechanics.

The various acts of battle will therefore remain the same: to prepare, to carry out, and to utilise the decisive attack.

The task of the commander consists, as in the past, in foreseeing those acts from the outset, and in adopting a distribution of forces which should, so as to meet the needs, tend to: (1) Protecting the forces from the enemy, and therefore opposing to him, on all points where he shows himself, forces capable of resisting for the whole time the preparation will last; and (2) *Organising the decisive act*, while *reserving* a mass which should be ready to meet the unforeseen or to intervene at the right time in the struggle, according as it is necessary to *parry* or to *thrust;* a disposition which, in order to comply with the principle of economy of forces, devotes to *preparation* what is strictly necessary; to *execution* the largest numbers possible, and to *utilisation* everything that is left valid. But it is not possible to submit the distribution of the whole to absolute rules of a mathematical nature, more especially as regards the reserve of the last hour, the strength of which obviously depends upon such information concerning the enemy as one may possess at that moment, also upon circumstances and upon the temperament of the commander.

Let us remember Bonaparte sending his last man into action at Abukeer, and Napoleon in 1812 sparing his reserve at the Moskowa (Borodino), because at the Moskowa, instead of being a young general with a future who had nothing to risk, but everything to gain, he was a successful Emperor who had everything to lose. So true is it that, according to the stake, he himself altered his play.

Let us then resume, under these modern conditions, the study of the preparation and execution of a decisive

attack, so as to see what tactics are required by these two acts of battle, what use ought to be made of the different arms.

(*a*) Preparation

By preparation is meant all the dispositions the object of which is to *make possible*, that is, to *set in the right direction*, and *ensure* the execution of, that decisive act which is the principal act of battle. This is a new development of the idea of security already studied, taken here in the widest sense of the word, and aiming at *acting with knowledge and manœuvring under shelter* from enemy blows, so long as one is not able to return the blows and to return them abundantly.

The first object of preparation is, then, to supply the commander with the intelligence he needs in order to *direct and execute*, with full knowledge of the case, the decisive act of battle. Considered from that standpoint, it involves seeking the objective to be struck, for the means and ways leading to that objective, as well as determining the enemy's situation. The part it plays in thus looking for direction and information has to be carried on until the moment when the decisive act is performed—that is obvious—but it also begins sometimes several days before the battle. If one has to deal with large units, for instance, with armies, the information collected during these days concerning the situation and distribution of enemy forces, already indicate how one's own forces must be distributed, and largely determine the direction and importance of the decisive attack, although it is impossible to think of altering one's plan at the last moment.

Thus the strategical advance guards of Napoleon (more particularly those of 1806 and 1809) supply by their intelligence service a basis for the Napoleonic manœuvres, as well as providing later on, by their resistance and their hold over the enemy, the pivot around which that manœuvre develops.

Thus again did Moltke set up the battle he was seeking about August 9th, 1870, on the Sarre. It was after receiving reports on the situation of the French army that he decided to attack it in front with the First and Second Armies, while the Third, debouching from the Vosges, should carry out a flank

attack which was to be the decisive act of his scheme. The preparation, here, had begun long before August 9th.

At the outset, preparation consists, as you see, in trying to secure information by means of *exploration ;* it devolves thereby on cavalry supported by artillery.

In proportion as the enemy comes nearer, intelligence devolves upon the service of security. But as preparation must also maintain the commander's freedom of action up to the last moment, so as to make it possible for him not to take a decision before he can do so with full knowledge, preparation and security are conveniently left in the same hands. The advance guards then intervene in order to *stop* the enemy, or at least to *keep him off.*

Let us remember Saalfeld. To this end :

The " élite " battalion occupies Garnsdorf;

The 17th regiment occupies { The south-eastern outskirts of the woods; Beulwitz.

As has been also seen, had Marshal Lannes been confronted by a more carefully concealed Saxo-Prussian division, he would have extended his reconnaissance; the advance guard would have been more active : it would have sent out reconnaissances on Saalfeld, on Crösten, fired with guns on one or the other of these places, so as to compel the enemy artillery to disclose itself. It would have in any case kept the *points d'appui occupied,* so as to be ready to resist.

Once that moment has come and the advance guard has gone into action to fulfil its task, a *plan of action* (if it has not been set beforehand, as often happens with large units) must be decided upon; that is, it is necessary to *make a distribution of forces,* or *decide to break off the fight.*

But, besides what has just been said, preparation must also *conceal* the direction and moment of the decisive attack; it must *cover* the organising process : hence a new mission, that of protecting and *covering* the attack.

Preparation must at the same time *maintain* the previously reconnoitred situation of the enemy, *deprive* him

of the means and possibility of preparing a manœuvre on his part; therefore, immobilise him by depriving him of the physical possibility of assembling an adequate force which he might victoriously oppose to the effort of the decisive attack; to this end, undertake a number of *actions* against the enemy.

Processes of Preparation

In order to fulfil this twofold task, preparation must attack the enemy wherever he shows himself, so as to inflict serious losses on him, to deprive him of his means of action, to paralyse him, to threaten him, which prevents him from removing his forces to some other place. Its attitude must therefore be a *resolutely offensive* one.

But it must at the same time keep him off if he becomes threatening, it must be *able to resist* and *know* how to do it. While acting, preparation must prepare the means of successfully defending itself.

To *conquer* and to *maintain* with ever-increasing vigour is its formula.

On the other hand, the small number of troops preparation has at its disposal on a usually wide front (several miles : from Garnsdorf to Beulwitz the distance is 2500 yards) does not allow it to act with harmony on the whole line. The offensive action tends to subdivide itself; it aims at conquering the points of the ground (" points d'appui," or commanding points), the possession of which will make it possible to conquer easily and afterwards utilise the intervals between them.

Had the enemy protected and organised himself at Saalfeld, he would have occupied Garnsdorf and Beulwitz. Garnsdorf then Beulwitz would have been attacked; the possession of the interval would have resulted from that. All the troops available would have supported each other, if need be, in order to carry the first of these two villages. The thing being done and the hold secured, they would have occupied the first with as few men as possible and would have reformed with a view to carrying the second village.

On a modern battle-field, where resistance is usually organised in depth, a second line of obstacles will be found behind a first line; troops which have started fighting, which have deployed, come into action and get mixed up; they must constantly be taken in hand again by officers commanding small units (battalions, companies), so as to be able to undertake new combined efforts against the numerous objectives they have to assault successively, and also to assault *simultaneously*—an indispensable condition to success.

Thus preparation troops will in practice soon be found, not to start *one single action*, but to be fighting several partial actions, conducted independently of each other with the object of conquering the resisting centres of the enemy.

As the latter is also attempting to do the same thing (until he has been completely immobilised), or as he is trying to recapture the points he has lost, there results a series of offensive and defensive actions, with a view to disputing the points of the ground, which generally impart to the combat of preparation a special kind of tenacity, of desperation, of length, producing among the enemy a wear and tear of forces and means, losses, physical and moral exhaustion, all of which are equally desirable results.

Hence also the duration of the combat of preparation which has been improperly termed a *dragging* fight; while it actually results in a constant offensive, carried on everywhere, moreover, under difficult conditions; in case of failure, it changes into a defensive prepared beforehand and kept up with desperation, so that it remains in either case the very reverse of a slack action.

To attack the *important points* of the ground, to carry them, to occupy them; to *defend* them, if they are attacked; to *retake* them if they are lost; to make them a *new base* for new progress if the enemy does not attack them : such are the processes preparation-troops must continuously maintain, until the enemy gives up every hope of conquering and leaves the place, or until they stop of themselves as a result of complete exhaustion. But even in that latter case they have to establish themselves in front of the enemy, so as to

threaten him or to drive him back if he attempt to advance.

As has, then, been seen, preparation consists in a multitude of partial combats, each of which, in order to secure success, to lead to decision, that is, to the conquest of the objective selected, involves a decisive act, a convergency towards the same point, at the same moment, of all available co-ordinated efforts. Such a decisive act will contain, in a lesser, but still certain proportion, the three phases involved by battle: *preparation*, *execution*, *utilisation*. In the case of each of these phases, the use and formation of troops are directed by the principles which should command the corresponding acts in battle.

It is also certain that such a great number of actions cannot be directed by a single man. The commander-in-chief plays his part by dividing the task of preparation between a certain number of subordinate officers, to the initiative of each of whom, according to his own means, he leaves the reduction of the enemy.

General Victor commands at Garnsdorf, General Claparède commands at Beulwitz.

The commander keeps to himself the main task, that of directing and carrying out the decisive attack, and he also keeps, in any case, the possibility of intervening up to the last moment with the help of general reserves.

Preparation finally ends in a general action along the whole front, in sometimes a very hard and often very long struggle. Therefore, although this operation should theoretically only absorb a minimum of forces, it requires in reality *serious sacrifices*,[1] which the commander must make ungrudgingly, so long as the waste thus incurred does not endanger the subsequent phases and more particularly the success of the decisive act;

[1] On August 18th, 1870, the Germans devoted to the first frontal attack the First Army (Seventh, Eighth, Second Corps); the Second Army remained by destination the army of manœuvre reserved for the decision; its task was therefore to go and find the right wing of the French army wherever it might be, and to extend its front as far as the point on which that wing reposed; the Second Army also devoted to the frontal attack the Ninth corps, with the Third in the rear; finally, therefore, we have no less than *five* corps taking part in the preparation.

sacrifices which he must make *early*, as the deployment of forces, that is, the process of establishing units facing their objectives, must take place out of the reach of guns, and therefore at a very great distance.

Preparation is, then, a multitude of partial combats, the object of which generally is to conquer successively, on the field, "points d'appui" or commanding points, organised and transformed into resisting centres and starting-points for new offensive actions; each of these combats involving three acts—preparing, carrying out and utilising a decisive action.

In such a preparation, what should be the part played by each different arm?

Part Played by the Three Arms

Artillery.—Artillery must obviously be the *first* to act, owing to its range, its mobility, and the fact that it can easily come into action and go out of it in order to proceed, when necessary, to some other place; moreover, it can act so as to *get hold of the enemy.*

Therefore the artillery of the main body, the largest part of which is marching close behind the head of the column, will speed up its movement. Protected by infantry, it reinforces the artillery of the advance guard.

What, then, are these bodies of artillery about to do?

The guns will *help* the advance guard in its mission, which consists in reconnoitring, immobilising, and wearing down the enemy; this implies taking the offensive; therefore guns will break the obstacles opposing infantry —"points d'appui," and enemy artillery.

As soon as progress becomes possible, the guns will avail themselves of that opportunity and advance in their turn in order to settle in a final way the fate of the enemy artillery. They will undertake to this end a struggle at a short range. This is the *artillery duel.* It is obviously a matter of the highest importance to secure as soon as possible a *superiority* in that duel between guns holding under their powerful fire the whole of the ground they can observe.

To this end, superiority of numbers must be secured immediately; a long line of fire must be immediately organised; all guns must be brought up, nothing must

be kept in reserve. Such is first of all the tactical formulæ for artilleries engaged in an artillery struggle.

Once the enemy artillery has been overthrown or silenced, guns must return to the task of *helping infantry*, by *preparing* the attack on the points which are the latter's objectives.

That preparation involves (as we shall see by and by, more particularly when studying the decisive attack) *clearing the ways of access*, the approaches leading to the objective, as well as *breaching the objective; following up the attack.*

Opening a way to infantry on the whole front so as to enable it to reach decisive acts; *helping* it in these attacks, in these decisive acts; these are the tactics of artillery in the course of the preparation.

Such an alternate function in the *artillery struggle* and the *infantry actions* leads to varying the grouping of batteries. In the first case (artillery struggle), divisional artilleries must attempt to join the corps artillery, under the effective or nominal command of the officer commanding the artillery of the army corps. All the batteries must then try to form a whole, *the artillery of the army corps* working in a common direction (which does not mean in a single place).

In the second case (infantry action, artillery in support of infantry), divisional artilleries of course remain under the orders of the generals commanding the divisions; they are reinforced by all or part of the corps artillery, which thus becomes an artillery attached to infantry under the orders of generals commanding the divisions. The whole artillery of the army corps tends to become divisional, and therefore to dividing itself and acting in two or three directions, those of the divisions.

Moreover, in proportion as arms are improved (quick-firing rifles and guns), infantry is compelled, when advancing, to move under cover, at least from gunfire; to this end, infantry has to utilise all practicable defilades and to follow them for the longest time possible. The *necessity of cover* increases every day.

But these ways of access are easily paralysed nowadays *by weak troops* occupying "points d'appui" and armed with quick-firing rifles, or enfilading with a few quick-

firing guns (two or three). Formerly many guns were needed to produce an effect. To-day, a few suffice. Hence this consequence, that the numerous ways of access, more and more necessary to infantry, would be impracticable if infantry were not helped from close at hand by an artillery capable of putting out of action the resisting means of the enemy. The union of both arms has become more necessary than ever. It is only when preceded by shells which break obstacles and silence the fire of enemy guns, that infantry will manage to move even in small numbers along its avenues of approach. And as the divisional artillery, be it reinforced or not, could not fire from one single central position along all these means of access in order to clear them, that artillery will often be brought to subdivide itself in order to follow and help infantry troops. Thus we shall have guns attached to a brigade or to a regiment, this being a temporary device which must not alter our organic constitution, but on the contrary must be made to show what elasticity and suppleness have to be displayed nowadays in managing an army. It is further obvious that the inconvenience resulting from the parcelling and apportionment of batteries becomes much smaller when we pass from a gun firing two shots a minute to a gun firing twenty.

One must nevertheless not lose sight of the fact that the moral effect, the characteristic of artillery, increases rapidly with the concentration of fire. It is only by means of an action *en masse* that one can try to secure important and decisive results.

Moreover, artillery possesses in the highest degree the means of effecting *surprise:* it is able, as soon as it appears, to make effect follow upon menace without delay. The reality of the blow follows the first apparition of danger. It must see to it that its action keeps this characteristic, and even possesses it, if possible, to an ever-increasing degree; to this end, destruction must be made to coincide with the entrance of guns in line, and, as few direct hits are wanted to put the enemy out of action, artillery must attempt from the moment of opening fire (this is made possible by firing processes as well as by the effects of projectiles) to bracket the objective widely, even if, in order to reach its result,

it should have to fire sometimes on a rather extensive zone.

Infantry.—Though it is artillery which begins the battle, it cannot do so unless it is safely protected. The alternative is too great a risk. Infantry must therefore *open* the battle-field for artillery and constantly *cover* the batteries by occupying points wherefrom it can protect them (Garnsdorf in our last example, and the ridges), and this at a sufficient distance for the batteries to be under shelter from enemy infantry fire.

Besides performing this *protective* mission, infantry holds the first place in preparation, the object of which is, as we have seen, to *wear down* the enemy; and this more particularly leads to developing action by fire: thus we had Saalfeld, 200,000 cartridges fired, that is, 20 per man.

The preparation-force must further immobilise the enemy. This makes it necessary for infantry to strike at the enemy, to *threaten him with a close attack*, with assault, and first of all to approach as near as the distance required for such an operation.

We shall now study this twofold action, by means of fire and march. We shall try and discover how such an action may be developed, with numbers reduced to what is strictly necessary, so as to reach the result wanted; namely, the threat at close range, which is not decision, but which it is none the less difficult to secure.

It is obvious at the outset that nowadays the direction of fire assumes, in the course of fights along the front, a capital importance. Fire has become the decisive argument. The most ardent of troops, those the spirit of which has been enhanced to the highest degree, will always want to conquer ground by performing successive bounds, but they will meet with heavy difficulties and incur considerable losses whenever their partial offensive has not been prepared by effective fire. They will be thrown back on their starting-point, with still more severe losses. A superiority of fire, and, therefore, a superiority in directing and performing fire and in making use of fire, will become the main factors upon which the efficiency of a force will depend.

Officers must keep the direction in hand as far as the assaulting distance. Therefore, fire *by command*, or at least fire directed and mastered (volley fire or fire

at will of a short duration and in squalls) is the only kind that good infantry will deliver when engaged in a lively action. On the contrary, slow, continuous fire, undirected fire (wasteful fire), as well as disorderly fire at will, in which the objective has not been sufficiently determined or in which the number of cartridges fired or the effect produced is not checked, must be absolutely prohibited as leading to a useless waste.

The fact that it is impossible to secure fully in peace the results of a true action must not prevent our trying te reach it in training practice.

No combat could be maintained between one body of troops having neither theory, nor training, nor fire discipline, therefore deprived of efficiency in action, and another body of troops perfectly trained, shooting and using fire with discipline, undeniably superior on the battle-field, even though it can display there but part of what it knows and what it is able to do.

In this connection we also discover the value of a knowledge of one's arm; the influence of the ground in determining what position must be selected. Such considerations must in no case restrict *offensive action*, which fire should, on the contrary, *favour* and *foster*, for fire, far from being an *end*, is never more (during preparation) than a *means* of keeping an advance going; it is to this end that we resort to it; and fire must cease as soon as the result desired—namely, the *possibility of resuming the advance*—has been secured.

Any rush forward must be preceded by a storm of bullets designed to *shake* the enemy, in any case to getting him to ground: this is the formula which has to be put into practice in order to promote preparation and to allow the movement to develop. Progress has, however, to be made over a ground strewn with shelters and obstacles of all kinds; preparation must therefore: drive the enemy from the covers of his ground; run up to the "points d'appui" and occupy them; should they be in enemy hands, attack them by setting up a number of combined actions in which the nearest first-line units or parts of units shall take part; put them in a state of defence—organise them—as soon as they have been carried; set the troops in order again, reform the various echelons; start from the points conquered in order to

try and advance again, take new objectives which will give rise to new attacks involving a new utilisation of forces: such is the series of undertakings to be carried on during the preparation, until the limit of the last covers or the main line of resistance of the enemy have been reached, or again, until the troops are in a state of complete exhaustion.

These efforts mainly devolve upon the *first-line troops*, as a result of the necessity of keeping the others covered at a distance, of reserving them in order to maintain and supply the preparation.

They cannot be directed by a high command, nor by a commander acting *from the rear* and sending up troops. Yet these first-line operations cannot succeed without having forces at their disposal. It therefore behoves officers commanding first-line units (companies, battalions) to display initiative and understanding in order to *combine* the action of their forces, however disorganised they may be, against the objectives to be successively carried; in order to reduce to a minimum such forces as are holding the conquered points of the ground, and to use the rest of their forces against the points which have still to be conquered.

Once progress has become impossible, they must try and attain by their fire the enemy artillery and organise their forces in order to drive back the enemy's attempts; this will be the last phase of preparation, until the moment when decisive attack is to be carried out.

To be well conducted, preparative action must assume an *ever-increasing vigour and energy* from its outset until the moment when the decisive act is about to be performed; this requires successive reinforcement, and, in consequence, a distribution of troops in depth, which is further unavoidable from the necessity of keeping one's reserves sheltered for a long time from the fire directed on the first line.

Though this preliminary action is often termed *a combat of mere demonstration*, it implies an extreme energy on the part of the performers. For troops in action, for secondary first-line units, there is only one manner of fighting, and that is to fight with the utmost vigour,

with all available means, utilising fire, march, tools if they have any. These are the only principles the rank and file and units used in preparation must know. To speak to them of a demonstration, a dragging fight, a slow action, still more of keeping still, would amount to inducing them not to act, to preparing them for flight, to breaking their spirit at the very moment when that spirit must be most enhanced.

Such an action, both slow and of long duration, which preparation demands, is a result of the commander's applying the principle of economy of forces in a fashion he alone can appreciate and determine.

The higher command devotes to preparation a minimum of force, so as to be able to reinforce the decisive act as strongly as possible; the subordinate commanders, who are in charge of preparation, establish and reinforce their three lines according to the front ascribed to them and to the efforts to be made. The rank and file, when in action, must only know *full action*, the object of which is to *conquer* or to *hold*.

In consequence, every attack, once undertaken, must be fought to a finish; every defence, once begun, must be carried on with the utmost energy.

A force must never stop till it is exhausted, and when echelons in support, of which the commander disposes, begin to fail it. The more or less considerable intervention of these echelons thus regulate the advance at the commander's will.

Finally, as we have seen, the troops of the initial attack have to make use of improvised fortification in order to protect the points conquered against enemy counter-attacks.

Not only will first-line companies try and reinforce with the help of all the means within their reach and to their best ability the extreme "points d'appui" they may occupy at certain moments, but second-line companies and battalions must also consolidate those points in proportion as the progress of the action brings them up.

Finally, partial reserves, with or without the help of engineers, may organise supporting positions in prevision of a failure.

(*b*) Decisive Attack

Owing to its continually offensive attitude, the *preparation* has finally succeeded in throwing back the enemy's first lines, in carrying the enemy's advanced posts and in immobilising him by the series of its efforts and by threatening him with close attack. It holds him exposed to a more violent attack.

But it is by this time in a state of exhaustion; the greatest part of its reserves are in action, units are mixed, the number of officers is reduced, ammunition begins to grow scarce.

The preparation is now confronted by the main enemy forces, by important obstacles; a ground swept by fire or strong "points d'appui" (strongly occupied and only to be approached with difficulty).

In front, there is a, so to speak, "impassable" zone; no defiladed ways of access are left; a hail of bullets sweeps the ground in front of the first line. But success has not yet been secured; "nothing is done so long as something remains to be done" (Frederick). The laurels of victory are at the point of enemy bayonets. They must be plucked *there;* they must be carried by a fight hand to hand, if one really means to conquer.

To reinforce the troops of preparation in order to attain the result would be without effect: a battle of parallel lines would begin and would remain *powerless.*

To *run away* or to *fall on*, such is the unavoidable dilemma. To fall on, but to fall on in *numbers* and *masses:* therein lies salvation. For numbers, provided we know how to use them, will allow us, by means of the physical superiority placed at our disposal, to get the better of that violent enemy fire. Having more guns we will silence his own; it is the same with rifles, the same with bayonets, if we know how to use them all.

Numbers imply a *moral superiority* in our favour, owing to the feeling of *strength* connected with numbers, a feeling we shall increase by means of *formation.*

Numbers create *surprise* in the enemy's ranks, as well as the conviction that he cannot resist; a conviction caused by the sudden appearance of danger, by the speed and proportions of an attack he neither has the time, nor the means to parry.

But in view of that decisive attack, we must:

(1) complete the preparation of it; (2) carry it out; and (3) round it up and utilise it.

The attack has to be prepared, in view of the enemy's powerful fire which must be silenced by superior fire, also in view of the resistance offered by the " points d'appui " which must be broken. The zone over which the avalanche will pass must be cleared; a breach must be made, through which the avalanche shall assault the obstacle: such is the object of final preparation for decisive attacks. This is effected by resorting to artillery in the mass.

Preparation: Artillery

" Whoever manages to bring by surprise a mass of guns to a certain point, is sure of carrying the day " (Napoleon). Hence the part played by the Emperor's artillery reserves at Friedland, Wagram, Lutzen, etc.

In 1870, the artilleries of the Guard, of the Twelfth Corps, part of the Tenth, about 300 guns, open fire against Saint-Privat.

To make a breach on the front of attack, to open the way for infantry, to keep it clear once it is open, to sacrifice itself if need be in order to enable infantry to perform its task, to watch the batteries and counter-attacks of the enemy; such is at this moment the mission of our artillery.

To this end, the largest possible number of guns enters into action towards the point of attack. There can never be too many guns, there are never enough of them.

All the artillery groups placed near that point, those which would still be available and could enter in line: corps artillery, the artillery of the infantry divisions, of the cavalry divisions, of second-line army corps, those which have taken part in the preparation and which are now without an object; all of them work in the same direction, by means of a fire at the same time violent and suddenly unmasked, the intensity of which continually increases.

In order to fulfil this task, it is enough that artillery should *see;* all the batteries which can act from their position must be left where they are. They must, on the contrary, be moved if they cannot see. Such are the tactics to be adopted.

A quarter of an hour's quick fire by a mass of artillery on a clearly determined objective will generally suffice to break its resistance, or at any rate to make it uninhabitable and therefore uninhabited.

The mass of artillery must then open a quick fire a quarter of an hour before the infantry mass enters in line. Such will be the rule; artillery fire must begin later if the infantry attack, starting from a great distance, needs a longer time before coming within efficient range for infantry fire.

Against what should fire be opened? Against the obstacles which may delay the march of infantry.

The first obstacle is the enemy gun. It will be the first *objective* assigned to artillery masses.

Once superiority shall have been secured in that struggle, obstacles and shelters covering the road to that objective will have to be smashed, or at any rate made untenable. The second part of the same task of preparation will consist in destroying and riddling with projectiles the infantry occupying or surrounding them.

Once the road is open, it must be *kept clear;* once the breach is made, the enemy must be prevented from filling it; therefore one must be able to go on firing against the part of the enemy front which is our target until it shall be assaulted by the attacking infantry.

The success of the attack must also be ensured by striking at any kind of troops the enemy may oppose: fresh batteries, counter-attacks.

In order to fulfil this third rôle, the artillery masses prepare groups of batteries (called groups of attack and of counter-attack), designed to follow and support the infantry columns, as well as to manœuvre in the directions which threaten danger.

As their movements must be carried out very quickly, it behoves the commanders to foresee those movements and to see that roads and positions should be reconnoitred in the direction each of them will take: ahead, on the exterior wing, etc.

Such a simultaneous action can only be performed by numerous batteries after a single command over them has been set up, which shall be capable of directing fire as well as of dividing between them the various portions of the task just mentioned and of making their efforts comply with the needs of the infantry attack.

Moreover, while the artillery of the decisive attack thus enters upon the stage, all the other batteries taking part in the original preparatory attack increase at the same time their fire along the whole line.

Execution : Infantry

During the general preparation for battle, which has lasted for the greater part of the day, infantry troops designed to carry out the decis ve attack have assembled facing the objective, utilising to this end all the ways of access on the ground. They have halted behind the cover nearest to the enemy, sheltered, protected by the preparation-troops. They must also be kept there free from the strain of combat; they must be distributed facing the zone of ground they will have to cover in order to reach their objective, in a condensed disposition which should enable them to take without difficulty the formation and echeloning prescribed in view of the attack. The mass should, of course, be protected by scouting and covered in all dangerous directions.

The moment has come to act. Artillery is shaking the enemy's resistance; infantry must now overthrow him. In order to decide the enemy to retreat, we must *advance* upon him; in order to conquer the position, to take the enemy's place, one must *go* to where he is. The most powerful fire does not secure that result. Here begins more particularly the action of infantry masses. They march straight on to the goal, each aiming at its own objective, speeding up their pace in proportion as they come nearer, preceded by violent fire, using also the bayonet, so as to close on the enemy, to be the first to assault the position, to throw themselves in the midst of the enemy ranks and finish the contest by means of cold steel and superior courage and will. Artillery contributes to that result with all its power while following, supporting, covering the attack.

How shall these infantry masses act?

The formation to be taken obviously varies according to the ground and to the distance at which the infantry is unmasked. It is in any case determined by the general considerations ruling all infantry action, the value of which is accentuated when a decisive attack

is in question, as such an attack implies a specially severe action, the single object of which is to lead without delay to the integral solution, the *decision*.

First of all the mass has to be brought to a distance (600, 700, 800 yards) wherefrom it may make an efficient use of its arms. Until it reaches that distance, it remains unable to act usefully by fire and suffers itself from enemy fire, mainly from the fire of the artillery, which, by rapid fire, would succeed in disorganising an uncovered attacking body.

We find then, first of all, a period of movement during which the infantry mass, disarmed so to speak, attempts to evade as much as possible, by means of methodical formations and quick movements, the effects of enemy fire. Hence the combinations which aim at making troops less vulnerable and more mobile: thin lines, formations on one rank, subdivision on the flanks; " swarms," " checker-board formations," etc.

However, in the presence of an enemy master of his own fire and free to use it against the oncoming mass, a formation, however skilful it may be, will not generally make it possible, of itself, to advance under fire over an open ground, not even to cross, under those conditions, spaces of any length; losses would be incurred which would break the organisation and above all the spirit of the troops, of the infantry mass.

To-day even more than in the past, the art will consist, during this period of the march, in utilising all the defiladed ways of access and all the cover provided by the ground. The formation to be given to the mass, far from aiming at symmetry, at harmony, at regularity, must only tend to enabling the greatest possible numbers to secure those advantages of cover which nothing can replace.

On the contrary, in the second phase of combat, from a distance of 600, 700, 800 yards from the previously reconnoitred enemy position, the mass is able to develop its whole power: firing power and striking power. The formations to be adopted must tend to make the most efficient use possible of these two means of action: to make one succeed the other without a hitch, so that the combined effects of fire and assault should be superimposed and added one to the other.

The consideration of what fire one may oneself receive now becomes a secondary matter; the troops are on the move and must arrive; moreover, there is but one means to extenuate the effects of enemy fire: it is to develop a more violent fire oneself, capable at least of getting to ground and paralysing the enemy; another means consists in rapid advance.

To march, and to march quickly, preceded by the hail of bullets; in proportion as the enemy is hard pressed, to bring forward more and more numerous troops, and, moreover, troops well in hand, such is the fundamental formula for the formations to be taken and tactics to be adopted.

An infantry body of two ranks [1] obviously fulfils the twofold condition of providing powerful fire and rapid advance. Therefore such a body will, for a certain time, be equal to the task. But the mass melts away while performing that task; it soon stops and becomes exhausted before reaching the position. Hence the necessity of having a second line which should be particularly strong, coming nearer and nearer to the first, designed to prevent the attack from receiving a check, to push the first line on ahead, to draw it along on to its destined position. We thus have the second-line battalion (or battalions) of the regiment in fighting order, launching (in order to make an end) into the more and more billowy, confused, mixed line, whole companies in close order (line or column) and fully commanded.

But an attack organised in the way just described can only act straight in front. If left to itself, it would have its flanks, or at any rate its external flank, exposed to the enemy's attacks or counter-attacks. Still, it cannot succeed otherwise than by a *direct, quick, continuous* march. Hence the necessity of protecting the attacking force against any kind of *surprise*, of establishing, therefore, in the rear a group independent from the attack itself, capable, by means of a specially organised security-service, of *scenting* the counter-attack, capable also, by making a manœuvre which, thanks to that security-service, is always possible in time and space of *parrying* the counter-attack, which generally

[1] Regulation front of combat for one battalion: about 300 yards.

includes the largest part of enemy forces. This is the first part to be performed by the reserve.

But besides this, after the attack has assaulted and carried the position, enemy reserves come up before it is possible to restore the attacking troops to order. These reserves must, of course, be immediately dealt with—more especially if they carry out any counter-strokes. Hence another necessity, that of keeping an important reserve for the attacking force up to the very end, which reserve shall be left at a sufficiently long distance behind not to be involved in the fight of the attacking force or reached by the fire which the latter has to endure.

Finally, such a reserve being capable (1) of imparting a last impulsion to the attacking force if the latter is held up close to its objective; (2) of protecting the flank or flanks of the attacking force; and (3) of immediately taking charge of any action directed against reserves; that reserve will need: (1) considerable numbers, indeed numbers almost equal to those of the attacking force[1]; (2) a distribution in space which should prepare the performance of its threefold task while first keeping the main body at a distance; (3) a distribution which should make it possible to end the affair by hurling in the largest part of the available forces on the heels of the attacking body.

The disposition just examined presupposes, of course, that the preparation-troops have already come very near to the objective. This is not generally the case, at any rate when large units (army corps or divisions) are in question. They generally come in action *over a ground* which, owing to its very extent, is but imperfectly scouted, *against an enemy* who is but incompletely invested, or even is not invested at all, at least in the direction they have to follow. This was the case of the Twelfth Corps, on August 18th, 1870. Before marching on Saint-Privat—the objective which had been assigned to it and which was the resisting centre of the enemy on that part of the battle-field—it had of all necessity to carry Roncourt, to guard against Jaumont

[1] Thus a brigade in charge of carrying out a decisive attack will generally devote one regiment to the attack itself (on a front of 600 or 800 yards) and one regiment to the reserve, with the functions just defined.

woods, to drive back the enemy's advanced posts, to invest him, to reconnoitre his establishments in the surroundings of the appointed objective, and therefore the various points the storming of which had to be combined with the attack on the main objective. The decisive attack in such cases changes from a mere assault to a *manœuvre, a manœuvre of decision.*

This task of preparation on the front of the Twelfth Corps was that of the advance guard. In proportion as it was fulfilled, the progressively reinforced advance guard closed more and more on the enemy, and was changed at last into a firing-line which attempted to secure superiority in the direction in which the decisive attack was to proceed, such a firing-line covering at the same time the advancing mass which was to strike the blow.

To-day as in the past, the attacking mass cannot succeed unless it possesses the firm will to reach its objective. Any force charged with carrying out a decisive attack must be full of Bugeaud's maxim: "When the moment has come to act, you must march on and meet your enemy with that energy and self-possession which alone enables a man to perform anything whatsoever."

Therefore we must have *vigour, speed, violence, no long halts,* and therefore a *quick pressure* from troops behind so as to urge forward the first-line troops. These must be the characteristics of action at that moment.

The attack on the whole front must, of course, be resumed at the same time. All the troops of the preparation then turn to execution. The charge is sounded on all points: let us remember the example Garnsdorf in the action studied above.

Cavalry, Completion, Utilisation

At the very time when the crisis of the tragedy, the infantry attack, is developing, the squadrons of the attack suddenly appear out of a cloud of dust or of smoke, on the flank or in the rear of the position. They, too, have had to reach the ground where the

fate of the day is to be settled, and, since distance is no obstacle to them, they have found sheltered ways of access which have enabled them to reach at any rate the external wing of the attack. They charge thence on anything that is still resisting among the enemy, or on enemy cavalry trying to charge on the attacking infantry, or on arriving enemy reserves as they come up. Such reserves alone are capable of regaining the upper hand, and on that account are hastening up. It matters little whether the attacking squadrons make straight for them, whether they unsparingly charge in front, in flank or in reverse. The reserves may get rid of that cavalry by fire; but in order to be able to fire, they must halt—and meanwhile the affair is decided.

Whether cavalry aims at threatening enemy squadrons or enemy reserves, it will always find, at such a moment when nerves are strained, strength and caution absorbed or exhausted, an opportunity for being useful.

For cavalry as well as for other arms, then, there is both a necessity and a possibility of acting, and this by means which must be entirely left to the commander's initiative, the object being to facilitate the decisive attack. That attack is a *victory for all*. It sometimes arises even from the apparently fruitless efforts of some, but in every case from the *concord between different arms*, from the *resultant of their converging efforts*, from an *assault delivered arm in arm*.

Such are, in their main features, the principles of execution in a decisive attack, of the *event* in battle.

Selecting the Point of Attack

Decisive attack means using the mass and securing thereby moral superiority and physical superiority.

Moral superiority, in so far as it results from numbers, formation, etc., does not suffice nowadays with such arms as are in use: the effect of these arms is too demoralising.

Physical superiority must be developed as well, by advantageously using the numerous guns and rifles provided by a mass—a thing which requires *space*.

Hence, in modern tactics, the vogue of flank attack which enables one to develop against one point (the objective) that superiority of fire which we seek; to

carry out fire of an undeniable moral efficiency in flank and even in reverse; which, further owing to the space at its disposal, makes it *possible* to *manœuvre* a mass.

For the same reason, the central attack so often resorted to by the Emperor has been given up. The assailant resorting to it nowadays would be enveloped by enemy fire; he would not be able to develop all his own fire.

Ground also intervenes in determining the objective to be assigned to the decisive attack: up to 600 or 800 yards, the attack *endures much* and does *little harm* itself to its adversary.

The art, then, is to reduce this zone of advance, in launching the attack *from as short a distance as possible.* Ground provides the means for it.

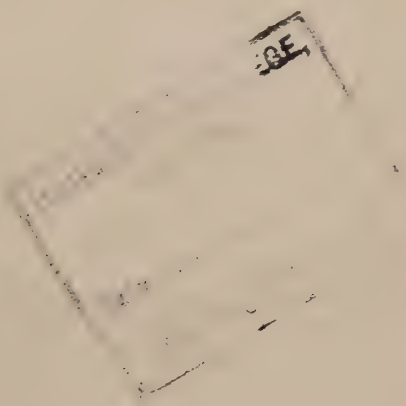
Moreover, an attack, once started, must *advance rapidly.* It must have, therefore, a ground free from *obstacles*, which does not mean free from *shelter.* The ideal ground is one that should be at once open (not blind) and broken—affording cover. What is important is speed.

Ground may determine of itself the point of attack, for if those two possibilities are secured—*starting from a short distance,* and *advancing rapidly*—the drawbacks of a central attack, such as have been mentioned above, will disappear.

Moreover, battle sometimes makes it possible to discover a point where the enemy is *giving way;* what we termed, at the beginning of these pages, a point of *insufficient resistance.* It is obviously on such a point that one should hurl the avalanche of attack; it is there that the decisive assault is most likely to succeed.

Similarly, it will be often necessary to use the masses *wherever* they may be, after they have been brought there either as the result of a more or less accurate knowledge of the enemy's situation, or by following the ways of communication, etc. They cannot be transferred from the left to the right of the battle-field. Modern extended fronts do not allow of this. One no longer has the time to effect it.

Finally, strategical considerations sometimes determine, as at Saint-Privat, on August 18th, 1870, which

enemy wing ought to be assaulted, what objective ought to be given to the decisive attack. In these various cases, tactics must start from an initial situation often far from favourable and make the best possible use of it, in order to carry out the decisive attack successfully in spite of all. Tactics still remain able to ensure those results provided the commander takes special dispositions *by measure*, so to speak, and avoids indulging in general and theoretical dispositions which, having been selected in advance, cannot fit the special circumstances of the case.

Finally, and with reservation of the advantages mentioned above, decisive attack must not, in the battle of to-morrow, be made to take place indifferently on any point of the line; whatever theory may teach, such a point may be imposed on us either by our own requirements, or by the enemy's movements.